



89/2

A COMPREHENSIVE
TREATISE
UPON THE
SYMPTOMS, CONSEQUENCES, NATURE,
AND TREATMENT
OF
VENEREAL, OR SYPHILITIC,
DISEASES.

TRANSLATED FROM
THE SEVENTH FRENCH EDITION OF

F. SWEDIAUR, M.D.

Scientiæ veros fines cogitent; nec eam aut animi causâ petant, aut ad contentionem, aut ut alios despiciant, aut ad commodum, aut ad famum, aut ad potentiam, aut hujusmodi inferiora; sed ad meritum, et usus vitæ, eamque in charitate perficient et regant.

BACO DE VERULAM, *Præf. ad Novum Organum.*

IN TWO VOLUMES.

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PREFACE.

I BEGAN in the year 1770 to make and collect observations on syphilitic or venereal complaints; since that period I have examined, during my travels in different parts of Europe, what were the opinions of the most celebrated practitioners of every country on this subject; and I was soon convinced, that most of the theories in vogue were either false or defective, and that the treatment of those disorders was susceptible of great amelioration.

Having then for many years collected without interruption many facts and observations, I resolved to make them known; and in 1784 I published at Edinburgh the first edition of this work, under the title of “*Practical Observations on Venereal Complaints*,” 1 vol. 8vo. This edition being sold off, I published a second in the year 1786, in London, without any change being made in the text. In 1788 I gave the third edition with corrections and additions, which, during my absence from England, was surreptitiously reprinted at Edinburgh.

I mention these circumstances, because it is consoling to the philosopher to have contributed to the advancement of the art, and the relief of suffering humanity. Useful inventions, like seeds, grow and ripen in silence, the fruits are gathered without trouble, and the vulgar enjoy both without enquiring how they were produced, or at all reflecting on what they cost. The numerous compilers of the present day, who copy the discoveries of others without citing the works from which they have taken them, impose but too often on the public by their false pretensions, and their usurped rights. They shine with borrowed light, and arrogate to themselves the merit of inventors.

The man of worth, on the contrary, is scrupulously exact in citing his authorities, and if his discoveries are assumed by others, he is easily consoled in seeing his labours tend more and more to ameliorate the fate of humanity.

On the publication of my first edition, Dr. *Gibelin* gave a translation of it into French in 1785, which was soon after reprinted.

Since that period. I have pursued without intermission my researches and observations on the same subject, and my materials in a few years having increased to a very considerable extent, I determined on entirely recomposing my work; and in 1798 I published in French a *Traité complet sur les symptômes, les effets, la nature, et le traitement des maladies syphilitiques*, in 2 vols. 8vo. Paris. This edition, under seve-

ral points of view, may be regarded as an entirely new work, for besides containing all the matter of the English edition, it included many new observations, as well as the solution of several important questions, which I was not able to resolve in the preceding editions for want of a sufficient number of facts and observations.

This edition was favourably received by the public, and being soon out of print, in 1801 I put it again to press, without making any alterations. In 1809 another edition was called for. In that of last year I published the treatment of all the different disorders produced by confirmed syphilis. I have done the same in the present English edition, making the additions and corrections suggested by judgment and experience.

I have developed my subject as far as the present state of our knowledge and my abilities permitted, I have omitted nothing essential, and concealed nothing from those who are desirous to learn; for the more I regard as unworthy of a medical man the having secrets to the profession, the more I despise the conduct of those physicians, who, to satisfy the vain curiosity of their patients, or to inspire a high idea of their knowledge, or a great opinion of their skill, and by this means to captivate confidence, can descend even to explain to them the name and virtues of the medicaments they prescribe. Nothing, in my opinion, contributes more to propagate true charlatanism amongst all

classes of society, than thus to degrade the art of healing, and nothing is more capable of keeping alive jealousies and slander amongst medical men. Besides it is generally a false confidence ; for these kinds of explanation are only for the generality of patients, so many *Greek* or *Hebrew* words, which make them imagine, they know something of the art of healing, of which however very frequently, neither they nor the doctor himself have any very precise idea : and it thus generally ends in doing more harm than good. The patient who consults a medical man requires relief, and it is the duty of the latter to heal him, and not to play the part of a *savant* or a professor, as is but too often the case, especially in France. There is no enlightened practitioner, who does not every day observe the evils resulting to society, from the ignorance of those, who fancy themselves learned enough to be able to give their advice to others : many patients would now be alive and even cured, who have perished, or who drag on at present a suffering and miserable state of existence, from having listened to these empirical advisers.

In communicating without reserve to the profession all that I know on the subject, I do not pretend to persuade any one, that I shall render all those who read and study my work able practitioners. In order properly to apply to patients the most simple truths, the most energetic remedies, the most useful discoveries, and

the best described methods; it requires, besides other branches of knowledge, judgment, and often even great genius; qualities which cannot be communicated by books. There is not however any art or any science in which mediocrity is so dangerous as in medicine.

It was a delicate question for the author to know, whether he ought to publish the cases peculiar to himself; but after mature reflection it appeared to him, that not to do it would be a misplaced delicacy; that it was the duty of the philosopher to turn even his own misfortunes to the benefit of suffering humanity. He thought that the disorders observed by a physician upon himself, might furnish more instructive and more decisive remarks for young practitioners, and more consolation for the patients themselves. He felt that he could have never so thoroughly investigated his subject, nor have dared to decide on many points as he has done in several of the chapters of this work, if he had not derived such knowledge from his own personal experience, and from his own sensations.

It is consoling for humanity, that enlightened and active reason finds nearly always solace and a source of happiness, where passion seems only to view death or the most frightful woes. It is consoling to see that the most terrible scourges of the human race, the most hideous, painful, and obstinate disorders, and which were generally regarded as incurable but a very few years

since, are at present not only efficaciously relieved, but even radically cured; and the consciousness of having in some degree contributed thereto, is not one of the least sources of satisfaction to the author.

Nothing retards the progress of medicine more, than the errors propagated by writers, who have acquired some reputation. I have therefore endeavoured, especially at the commencement of the work, to combat the opinions which I believe to be erroneous; but I have simply exposed them, and generally without naming their authors. If my observations be correct, and if my conclusions be just, nothing more can be necessary to refute and make them be forgotten.

In the first chapter, my object has been to develop the history of the diseases of the genitals, known to the ancients previous to the period in which syphilis appeared in Europe.

In the second chapter, I have endeavoured to explore and elucidate the history of the syphilitic disease, and I think I have demonstrated the falsity of the opinion of those, who maintain that it came to us from America, and was imported into Europe by the Spaniards. The different historical facts which I have stated, and on which my opinion is founded, appear to me incontestible, and I perceive with satisfaction, that a modern author*, profoundly versed in the critical history

* *Versuch einer pragmatischen geschichte der Arzneikunde*
Von Kurt Sprengel, Professor of Medicine and Botany,

of medicine, is of my opinion, and which he supports by some new considerations.

I have rendered the opinion very probable, that the syphilitic disease began to appear in Europe about the year 1483. I have at least adduced evidence, that it had spread in Italy and Germany before the return of Columbus from his first voyage to America. I have proved that it showed itself in the commencement of its appearance in Europe, as an epidemic disorder, very contagious not only by contact with infected bodies, but also by their clothes and their utensils, and probably even by the atmosphere without any species of contact; that there died of it a great number of individuals, and that it was regarded for this reason as pestilential; that it had then a great resemblance to elephantiasis, and especially to the *yaws* or *pian* of the Africans; that it lost by degrees the character of a pestilential and epidemic cutaneous disorder, and that it has ended by becoming mild, as we find it at the present day, and by its being communicated with much less facility.

In the third and following chapters of the

Halle, 5 vols. 8vo. 1800; *i. e.* "A Philosophical and Critical History of the Progress of Medical Knowledge, and of the various Theories in Medicine, in different ages and amongst different nations, from the remotest periods to the end of the 18th century." I consider this as a truly classical work, and of which a good English translation would be very useful.

first volume, I have treated of the effects of the syphilitic virus on the organs of generation.

Gonorrhœa, or more properly blennorrhagia, has been one of the principal objects of my researches.

The abuse of words is an inexhaustible source of human errors; the word *gonorrhœa*, of Greek origin, signifies *a flow of semen*, and not sixty years since, *Van Swieten* and *De Haen*, two of the most celebrated physicians in Europe, taught this doctrine, yet nothing can be more false or more absurd; an attentive observation offers us more clear and precise notions on the subject.

The acrimony or virus applied to the mucous membrane of the urethra of a man or the vagina of a woman, during coition with an infected person, acts on these tender and irritable parts as an acrid matter would do applied in the interior of the nose. This virus there produces an irritation and a more abundant secretion, which changes in a few days the mucus that lubricates these parts, and which in the natural state is limpid and clear, into a yellow-greenish matter, in appearance purulent, precisely as it happens in what is called a cold in the head (*coryza*). This is the true idea which nature presents us of this disorder: it was therefore improper to call it gonorrhœa, or a flow of semen, and being evidently a flow or discharge of mucus, I have given it that name, in calling it *blennorrhagia*.

The real seat of this disorder is always ori-

ginally, in men, in the cavity of the urethra, at the *fossa navicularis* in the mucous membrane directly under the frænum, and even sometimes in the body of the mucous glands, which then forms a tumour that ordinarily suppurates or grows hard.

When the seat of the disorder is discovered to be lower down in the urethra, it is always in consequence of improper treatment or through some fault of the patient.

Nearly all practitioners have been of opinion, that gonorrhœa was always produced from the same virus as syphilis. Some, however, have recently doubted the fact, and they have fallen into the other extreme, in maintaining that gonorrhœa was never produced by the syphilitic virus. The happiness and tranquillity of many families, not less than the fatal effects arising from the improper treatment of this disease, seemed to demand the most careful researches on the subject. I am convinced from well-authenticated experiments, and numerous cases attended to with the greatest care, that the partisans of both those opinions are wrong in generalising them too much, and in speaking so positively and so lightly on a point of so much importance to the physician and the patient. I think I have proved to demonstration in the third chapter, that the blennorrhagia of the genitals of the two sexes owes its origin sometimes to the venereal or syphilitic virus properly so called, and sometimes to some other acrimony

applied to the urethra or the vagina. I have there related several well-proved facts, which demonstrate that this discharge is often really venereal or produced by the syphilitic virus, amongst others a case of my own in which syphilis was the effect and evident consequence of a gonorrhœa. I have observed a great number of similar cases, in which syphilis was the consequence of a neglected or ill-treated gonorrhœa. On the other hand I have established by well averred facts, that the blennorrhagia of the genitals is often evidently very different in its origin and nature from that produced by the syphilitic virus. It will easily be conceived of what importance this distinction is in practice; where on the one hand we see practitioners treat all gonorrhœas as venereal with mercurials, and on the other, by an ill-founded theory they suffer the syphilitic virus to be communicated and the disorder propagated through whole families, without giving themselves any trouble as to the unfortunate results.

The new theory and the new method of treatment, that I gave on the *swelling of the testicles* in the first edition, have been confirmed by all my subsequent observations. I consider this disorder as a simple sympathetic affection, produced by the virus which irritates certain parts of the urethra, without the testicle being ever itself in this case originally affected. My observations have also been confirmed by those of the most enlightened practitioners of Europe.

The chapter on the retention of urine and on strictures in the canal of the urethra, has received considerable additions since the first edition. It is to the united efforts of the most able medical men in Europe, that we owe an exact knowledge of those disorders of the urethra, the nature of which was but very imperfectly understood only fifty years since. Those disorders which produce the most excruciating pain, and sometimes death, and which threw great opprobrium on the art but half a century since, are at present in general not only efficaciously relieved, but even for the most part radically and very often sufficiently easily cured. I have endeavoured to unite on this interesting subject, all the useful results which dissections, my own observations, and the discoveries of the most enlightened men, have furnished.

In the chapter on *chancres*, or ulcers of the genitals, which have almost always hitherto been regarded as venereal, I have established essential distinctions, necessary for the practitioner, and useful for the patient in rendering thereby the treatment, from being merely routine, more exact and more rational.

I have carefully distinguished the different tumours of the lymphatic inguinal glands commonly called buboes, and in availing myself of the discoveries of modern anatomists on the system of the absorbent vessels, I have endeavoured to ascertain correctly the nature of those tumours, and to establish a method of

treatment much more speedy, simple, and rational, than all those previously adopted.

As to what has recently been asserted in England on curing syphilis without mercury, it is in my opinion far from being established on any solid foundation.

Not to mention the great difficulty which often exists, of distinguishing syphilitic from non-syphilitic ulcers, primary syphilitic ulcers from those of a different nature, I think, 1st. that it is highly improper to employ mercury internally, when the topical application of the same is sufficient to obtain a radical cure, as is often the case. 2d. It is imprudent to give large doses of it for weeks and months, when there is no evident necessity for such a treatment. 3d. It is still worse to administer acrid mercurial preparations, such for instance as corrosive sublimate, &c., when mild ones well prepared would produce the desired effect, as is generally the case. It is not to mercury, but to its imprudent or injudicious application, and the want of practical knowledge of the character and nature of the disease, that most of the disorders complained of as resisting mercury owe their origin.

Primary, *i. e.* recent local syphilitic ulcers and buboes, are in general radically cured in three or four weeks time, by the simple external and topical application of mercury, as shown particularly in chapters xii. and xiii. vol. i., whereas the same complaints require as many months

by the internal use of sarsaparilla, and even then the cure is often very uncertain, so that I am persuaded there are but few rational practitioners, who will follow such a practice, and trust solely to its efficacy in the moist and cold climates of Europe.

However when I maintain this doctrine, I would not be understood to disapprove of the use of sarsaparilla altogether; I think it might usefully be employed internally, at the same time that mercurial preparations are applied externally and locally on the parts affected, in order to assist the cure, or rather to secure the constitution, against the effects of the poison in case of absorption. A point highly interesting for the art, would be to ascertain by direct experiments, the anti-syphilitic power or efficacy of sarsaparilla in powder or decoction, by employing it externally and topically on primary syphilitic ulcers, instead of submuriate of mercury. It would also be highly useful to ascertain by repeated direct and precise experiments and observations, whether the sarsaparilla of Mexico, of the Bay of Honduras, of Peru, and that of the Brazils, have all of them the same power or virtue, or if not, the ratio they bear to each other for curing constitutional syphilitic complaints.

I have endeavoured in the first chapters of the second volume, to present the description and treatment of the syphilitic disease, such as it at present appears in Europe, and its effects on the

different parts of the animal economy, in a more clear, simple, and precise manner than had hitherto been done.

In examining the different modes of administering mercury, in comparing their respective advantages and disadvantages, I have particularly wished to impress upon young practitioners, that there does not exist any *single* method or single preparation equally suitable to all cases. Indolence, ignorance, and routine habit, would it is true find their account in supposing, and making it believed, some, that it is by corrosive sublimate, others that it is by mercurial frictions or some other preparation of mercury, that is to be obtained in every case a radical cure. These are palpable falsehoods, which but too often turn to the misfortune of the patient. The enlightened physician, and the honest and attentive practitioner, is easily convinced that in following a general routine in the treatment of disorders, not only that frequently no good is done, but frequently much harm.

Blennorrhagias, buboes, ulcers, and all local syphilitic disorders, demand, as well as general or constitutional syphilis, different methods and remedies, according to the constitution, the age, irritability, sensibility, idiosyncrasy of the patient; and according to the degree, obstinacy, and duration of the disorder, and according to its complication with other affections.

In neglecting those considerations, so necessary in order to obtain a speedy and happy

cure ; in treating all patients and all degrees of the disorder by the same method, and with only one preparation ; as well as in applying different medicaments improperly, and without judgment, it is not astonishing, that routine practitioners so often complain of the inefficacy of the methods, or of the bad effects of certain remedies ; that they become sceptical, and attribute to the imperfection of the art and science, what they ought rather to attribute to their own negligence and ignorance, and principally to the defect of that *coup d'œil* so necessary to judge of the nature and the degree of the disorder, and to apply to it at the proper moment the means and remedies adapted to the constitution of the patient, according to the species, and frequently according to the different varieties of the same disorder.

The action of mercury on the syphilitic virus merited a particular discussion, especially according to the analyses and discoveries of modern chemists. The reader will probably thank me for having seized this occasion of examining more particularly in chap. xii. vol. ii. into the utility of oxygenated remedies, and of showing the little confidence they appear to merit, for the obtaining by their means, at least in our humid and cold climates, a radical cure of syphilitic disorders. The reader will find at the end of this discussion, in the same chapter, an exact and faithful detail of the non-mercurial remedies, which some profes-

sional men as well as the most notorious empirics or charlatans have offered on this subject.

In fine, in chapter xiii. I have treated of the disorders produced by mercury, or the *mercurial disease* properly so called, the question is not on the effects produced by the exhalation of mercury, on the bodies of persons employed in working mines, or in the purification of that metal, nor of the deleterious effects to which gilders and other workmen of that class are subject, effects which after having cruelly affected the physical organization, finish by annihilating the intellectual one. My principal object in it is, to show the pernicious and frequently even mortal effects resulting from an imprudent external or internal administration of mercury for the cure of syphilis. This subject was absolutely new when I published the first French edition of this work in 1798 ; for I was unable to derive the least intelligence from the writers who had preceded me. I offered at the time the result of my observations on these disorders, which were then unknown or misconceived. The authors who have since written on the subject, have copied what suited them from my work without acknowledging it, but have added nothing to the information I had already given respecting this disorder, or the mode of treatment I had pointed out.

In the treatment of disorders produced by an improper administration of mercury, or by giving it in too large doses, the internal and

external use of sulphurous mineral waters, natural or artificial, will always deserve a preference, and in obstinate cases sulphurous vapour baths ought to be used, the patient is inclosed in a box, all excepting the head, sulphur is burnt in a small room, which communicates with the box, and his body is exposed to the vapour from fifteen to thirty minutes at a time. These baths, to produce the desired effect, should be repeated frequently.

Chapter xv. contains the history of the syphilitic disease, which showed itself at the close of the last century in Canada, and throws new light on the history of syphilis, and on the action of the virus.

The account rendered to the English government on this disorder, by an enlightened physician, has never been published, but I obtained the communication of it at the time, and I have given a faithful extract of it in this chapter.

The chapters xvi. xvii. and xviii. will in my opinion contribute to elucidate the same subject.

In chapters xix. xx. and xxi. on mercurial preparations in particular, the reader will find all that the discoveries of modern chemistry offer as to the easiest, most accurate, and most advantageous preparations of those remedies.

There will be found some repetitions in several chapters of this work; I have intentionally left them so, on purpose the better to fix the attention on new and important

points, and to excite young students to reflexion. Indolence, lightness, and ignorance, sometimes require repeated hints on the same subject.

I have availed myself in the course of this work, in speaking of chemical medicaments, of the new chemical nomenclature founded on reason and modern discoveries. The young medical student ought no longer to be ignorant of chemistry, but in order to obviate every difficulty to those who are not acquainted with the new names, I have given a comparative table of the old and new ones.

The Greek and Latin designations of diseases which will be found in different parts of this treatise, are taken from a work I published some years since, under the title of *Novum Nosologiæ Methodicæ Systema*, which contains a description of all the different disorders to which the human body is subject, their genera, species, and varieties, and their synonyma, together with their respective causes. This work, the fruit of thirty years labour, will be found far more complete than that of *Sauvages*, *Cullen*, *Darwin*, *Plauquet*, &c. My principal design in it was to facilitate to the young student, the study of the nature and character of diseases upon a logical and rational plan, divested of hypotheses and vague theories. It forms two volumes octavo, and may be had of Mr. Underwood, Fleet-street.

To conclude, I have rendered this treatise

on syphilitic complaints, in this new edition, as complete as my advanced age and the present state of our knowledge have permitted, and I have every reason to believe that it is now arrived at that degree of perfection which it is permitted me to attain.

FRANCIS SWEDIAUR, M.D.

London, June, 1818.

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HISTORICAL AND PHILOSOPHICAL RESEARCHES,

&c. &c.

CHAPTER I.

HISTORICAL SKETCH OF THE DISEASES OF THE ORGANS OF
GENERATION KNOWN AND DESCRIBED BY THE ANCIENTS.

Nos qui sequimur probabiliora, nec ultrò quàm id quod verisimile
occurrerit, progredi possumus, et refellere sine pertinaciâ, et refelli
sine iracundiâ parati sumus.

CICERO, TUSC. QUEST.

WE are so generally in the habit at present of regarding all the diseases of the genitals occurring after connection with a party at all suspicious, as syphilitic or (as it is commonly called) *venereal*, that to advance a contrary opinion would appear to a great number of persons, not excepting professional men, as a real paradox. However, on examining the subject a little attentively with me, and in reflecting a little more seriously than has hitherto been done, we shall be led to regard as demonstrated, that a great number of local diseases of the genitals which at present present themselves in practice, are not of a

venereal nature. It will be evident to the attentive observer, that many of these disorders derive their source from other causes, and to other acrimonies of a very different nature to the syphilitic or venereal virus.

It would seem in reading the different authors who have written on these diseases after the sixteenth century, that since this terrible plague (the syphilitic or venereal disease) has infected Europe, the effects of this active and formidable virus has been to dry up, or cause to disappear, all the other acrimonies which in all ages and in all countries attacked the parts of generation, or rather the medical men and their patients have forgotten that there ever existed any other cause than the syphilitic virus, which could produce diseases in those parts, or at least, which could be propagated by coition.

Professional men have surely forgotten all the causes which produce, or are capable of producing, disorders in the genitals, or they have been so far confounded, that when I travelled through Europe not fifty years since, to acquire or collect the knowledge already acquired in all the different branches of medicine, by the most enlightened men, some laughed, and others, regarded with an air of disdain, the doubts or conjectures which I then hazarded on this subject; and I am much deceived, if, even, at the present moment, the greater part of ordinary practitioners, do not regard without hesitation, all the cases of gonorrhœa and ulcer of the genitals which offer themselves in practice as venereal,

and treat all these disorders under this point of view, without even suspecting that the words gonorrhœa and chancre can be applied to any other than the venereal disease.

How often have I seen young men the dupes and unfortunate victims of this prejudice! how many virtuous women falsely suspected, how many fathers and mothers of families troubled in their repose, and domestic happiness, how many marriages or happy unions broken off, and rendered unfortunate, by this idea, by these superficial judgments, hazarded by ignorant physicians and surgeons!

And as if man were condemned from all eternity never to discover the truth, till he had exhausted a whole series of follies and errors, several practitioners, who have recently found that there might be diseases of the parts of generation which were not venereal, have fallen into the opposite error, advancing, maintaining, and publishing, that no gonorrhœa is venereal; but that all gonorrhœas are produced by a virus or acrimony entirely different from the syphilitic virus.

I have particularly endeavoured in this first volume to fix our knowledge on the point, and determine with more precision, the nature, and the different species of the diseases of the parts of generation; and as very different species may arise from impure coition, and seem consequently all to merit the name of venereal, I have thought it proper to abandon this vague

and equivocal term, and to substitute for it, wherever the question is of a disease produced by the virus, vulgarly called venereal, the word *syphilitic*; thus distinguishing with precision syphilitic blennorrhagiæ, ulcers, swellings of the lymphatic glands, &c., from all those which, communicated by coition, or in any other manner whatever, owe their source to other causes, and demand in consequence, other rules and a different treatment.

The syphilitic disease (*syphilis*) is not a simple disease, which affects a single organ, or only one part of the body, but it is an assemblage of different disorders in one or more parts of the body caused by the specific virus, which has hitherto ordinarily been denominated *venereal*, but which I have designated, the better to characterise it, by the name of *syphilitic virus*.

We say that a person is “poxed,” attacked or infected with the “pox” or venereal disease, or that he has the syphilitic disease or the syphilis *;

* The word syphilis appears to me to be derived from the words *συς*, *porcus*, and *φιλία*, *amor*, as if we should say *amor porcinus*, swinish love, filthy love, or a disease arising from impure coition. It must not be imagined that this word, though originally Greek, was ever employed by the Greek authors. It was *Fracastor* who first gave this name to the venereal disease in his beautiful poem, *De Syphilitide, seu Morbo Gallico*, written at the commencement of the sixteenth century. The author was born A. D. 1483, and died 1553. The etymology which I have adopted of this word, appears to me the most conformable to the manner in which this disease is propagated, at least at present, and

when the poison, or specific animal virus, which I call syphilitic, affects the system, and produces in it peculiar effects, such for example as ulcers in the throat, eruptions in the skin, pains, tumours, and caries of the bones, &c. But when the effects of this same virus are confined to the genitals, we do not ordinarily call the disease *syphilis*, *lues venerea*, or *pox*; we then distinguish each of its effects by a particular name, according to its different appearances, as *blennorrhagia* or gonorrhœa, *ulcer* or chancre, *bubo*, &c.

We are no better acquainted with the real nature of the syphilitic virus than we are with that of the small-pox, or of any other contagious disease; we only know, that applied to the body it produces such and such effects, which yield to such a method of treatment. The syphilitic virus, after having taken root in the body, attacks principally the mucous membranes, or the lymphatic or mucous glands of the genitals, and from thence, where it affects the constitution, it attacks principally the palate and the tonsils, the skin, or the roots of the hair, or the periosteum, and the bones. Although, like the scrophula, it frequently attacks the lymphatic system, it produces in it very different effects, it rarely attacks any other than the inguinal and axillary glands, or those of the extremities and

I shall therefore adopt in the course of this work the word *syphilis* or its adjective *syphilitic*, in preference to the word *venereal*.

the amygdalæ; and the tumours or swellings which it produces in these glands, or in the absorbent vessels, yield, in general, very readily to mercurial medicaments, while the tumours and obdurate parts of scrophulous glands obstinately resist the action of these remedies.*

Neither monkeys nor any other animal that we know of, appear to be susceptible of the syphilitic virus.† However BAYDFORT thinks that animals may be infected with it, but he neither adduces any authority nor any fact in support of his opinion. PAUW, in his *Philosophical Researches on the Americans*, says also, but without informing us from what source he derives the fact, that dogs, in Peru, are liable to catch the disorder, but that in North America they are not exposed to it. I have seen some dogs affected with a discharge from the urethra, and others who had corrosive ulcers on the penis, of which they at length died, but I have never been able to verify whether these disorders were really syphilitic, as several persons believed. I have also seen stallions, who, by coition had contracted ulcers in the penis, which the grooms called chancres, but these ulcers, carefully examined, appeared to me evidently of a different nature from the syphilitic ulcers, and they were easily cured by the application of cream.

* This subject is more particularly discussed in the following chapter.

† Mr. Turnbull mentions having made experiments on this subject, from which he concludes, that neither dogs nor rabbits are susceptible of the syphilitic virus by inoculation.

The smallest portion of the syphilitic virus is sufficient to produce throughout the body the greatest disorders ; it appears to extend itself by a species of fermentation, and by an assimilation of matter. When this virus has been applied to the human body it requires, like other contagious matter, a certain interval of time to produce this fermentation, if I may be allowed the expression, which determines the disease. For the opinion of John Hunter, and other modern writers, that the effects of the syphilitic virus, as well as those of the anti-syphilitic medicaments, are only owing to a morbid action excited by sympathy in the different parts of the body, and not to the virus itself, and the medicaments absorbed and deposited in these parts, appear to me without any rational foundation.

We are, at present, accustomed to consider mercury as endued with the specific property of destroying the syphilitic virus, but it is still a question in what its action consists. Much has been said of its evacuating, stimulating, and absorbing virtues ; and above all, of its power to produce a certain state of cachexia in the body. To one or other of these properties has been attributed its effect in curing syphilitic disorders, but certain it is, that the precise manner in which it acts is still unknown. All that we know is, that mercury, in a metallic form, has no chemical action on the human body, it must, previously, be combined with oxygen or an acid ; and it is in that state alone (under the form of

an oxide or a salt) that it is capable of exercising any action on the syphilitic virus affecting the human body, and of producing on it the astonishing effects which we every day witness.

On the other hand the accurate experiments that have been very recently made, have demonstrated to us that these effects are not solely owing to oxygen, as some persons have lately advanced, from an induction, or a too hasty judgment of analogy. In fact, if we administer oxygen under any other known form, excepting that in which it is combined with mercury, its effects appear very uncertain.*

Oxygen acts sometimes, indeed, in a sufficiently energetic manner on primitive syphilitic disorders, or on certain local symptoms, such as ulcers: but to radically cure, without danger of a relapse, constitutional or secondary syphilis, it must be united with mercury; so that we may safely assert that it is neither the oxygen nor the mercury alone, which effects a cure, but their combination; at least such is the case in the temperate climates of Europe, such as England, France, and Germany. Perhaps in the warmer climates, the chemical effects of oxygenated remedies on the human body may be more ener-

* The nitric and oxymuriatic acids, and even the oxymuriat of potash, although containing (in an equal volume) a much larger quantity of oxygen than any mercurial preparation; do not appear in most cases, especially in that of inveterate or confirmed syphilis, either so efficacious, or so certain in their effects (at least in our northern climate) as the various mercurial preparations.

getic, and suffice alone to effect a cure ; but this is what ulterior experiments must determine.

It appears to me, after all that has been observed on the mode of action of mercurial remedies, that they operate, either in combining with the specific virus, or with the humour in which this virus resides, by a species of chemical affinity or electric attraction by which these bodies, uniting together, change into a third, which has new properties essentially different from those possessed by either of the bodies before their union ; that consequently the syphilitic virus, in this new state, loses its active energy on the body, and ceases to be injurious to the animal economy. At least the fact appears to me incontestible, in daily witnessing ulcers, evidently syphilitic, of the genitals, radically cured by the simple local application of the red oxide or of the submuriate of mercury in powder.

The contagion of the small-pox produces its effects from fifteen to twenty-four days after the body has received the infection from the atmosphere, or at the end of eight or ten days after inoculation. As to the syphilitic virus, the interval in which it manifests its presence is neither constant, nor always the same ; it sometimes requires, perhaps in the same person, a longer time, on some occasions, than others. I have seen chancres appear in twelve hours, and sometimes even a few minutes after impure coition ; whilst in most other cases they only begin to appear at the end of as many days.

Most men feel the first symptoms of a blennorrhagia the second, third, or fifth day after having exposed themselves to the infection, but there are cases in which they do not appear until after as many weeks, or even months.

I was consulted, some years since, by a man attacked with a violent discharge from the glans, accompanied by a phimosis, without ulcers, which only came on a month after the coition, and during the whole of that interval, he had not felt the slightest symptom of the disorder.

I have the following fact from Dr. *Duncan* of Edinburgh. A young man sailed, some years since, for the East Indies, in apparent good health ; but on approaching these hot climates, after a voyage of four months, he was attacked before he landed with a violent blennorrhagia (gonorrhœa), although he could not have received the infection during the voyage. There have been cases which seem to demonstrate that the virus may remain during five or six months, or even longer, on the surface of the genitals, before it produces ulcers or a discharge, and without being absorbed into the mass of the blood : and if it had not then produced an ulcer, it is probable that, in many cases, it would not have been absorbed at all. We frequently see public women communicate the disorder to several persons during several weeks in succession, while they themselves have not the slightest apparent symptom of it, either local or general, the virus remaining during this time in the va-

gina, without producing the slightest action either on that canal or on the system.

Although the different effects of the syphilitic virus seem principally to depend on the constitution of the patient, his preceding state of health, the greater or less degree of irritability or sensibility of the body in general, or of the parts affected in particular, it appears probable, from the extraordinary ravages that are sometimes observed, that the virus itself has different modifications, and that it is, in some cases, more or less acrid, more or less irritating or poisonous. This opinion seems to be confirmed by a fact worthy of notice here : it is, that the syphilitic virus transplanted from a hot to a cold climate seems to produce, in all cases, much more violent effects ; that it is very probable the syphilitic virus was originally brought from a warm climate into Europe, where, at the commencement, it produced, according to the testimony of cotemporary writers, dreadful ravages ; in the same manner, that in our days, transported into Canada, it there produced the most frightful symptoms, similar to those which it produced on its first appearance in Europe. *Vide infra*, vol. ii.

I do not pretend to decide the grand question, of the period at which man first experienced the effects of this terrible poison. The time even, that is to say the precise year of the first appearance of syphilis in Europe is uncertain, nor are we better acquainted with the fact, from what

country it was really brought. All that we can affirm on the subject is, that we have no authentic proof, that this disorder, or rather this assemblage of symptoms which properly constitutes the syphilitic disease, such as it showed itself towards the end of the fifteenth century, and such as it at present exists amongst us, existed formerly amongst the Greeks and Romans. We find, however, in ancient authors, an exact description of several local diseases of the organs of generation, very similar to those at present produced by the syphilitic virus, such are particularly *the corroding ulcers of the prepuce and glans ; the discharge of a clear or sanious matter by the penis, the cancer-gangrene of the penis ; the Phagadenic ulceration of the same part, myonecii of the prepuce and of the glans ; the condylomata at the anus ; the tumours of the testicles produced without any external contusion ; swellings of the inguinal glands ; abscesses ; pustules ; the gangrene of the vagina, &c.* But it must be observed here, and we shall endeavour to prove in the course of this work, that these disorders may be produced by different other causes or acrimonies : and although several ancient authors have fully informed us, that these disorders were contagious, and were propagated by coition, we nowhere find that they then produced in the rest of the body symptoms similar to those which we now see produced by the syphilitic virus, when absorbed into the mass of the blood, or when it affects the system.

Although many of these ancient books were in the hands of all medical men, I have observed that forty or fifty years since, I never found a single physician or surgeon who had any idea that these disorders of the genitals could ever arise from any other cause than that of the syphilitic virus, and who consequently did not treat them all as syphilitic ; no one had yet reflected that these symptoms or disorders of the genitals, such as they at present display themselves, had been known before the appearance of syphilis in Europe.

The author who has recently thrown the greatest light on the history of the different disorders of the genitals in remote ages amongst different nations, and in different parts of the globe, is the late Dr. *Gruner*, professor at *Jena* in Saxony. He has published a supplement to the collection of *Luisinus*, in folio, containing extracts from ancient authors, Greek, Latin, Arabian, &c. rare and unknown, who had treated of the different disorders to which the genital parts of both sexes as well as the anus, had been in all ages liable. As this book is very scarce, and as it contains very rare and interesting facts, I will extract the most ancient information which has come down to us, on disorders of the genitals, and add a few remarks of my own.

I will commence with one of the oldest books that we know of, *The Bible* ; we find mention made in it of the gonorrhœa in the book called *Leviticus*, which is commonly attributed to Moses. Although the author shows, by the de-

scription he gives of this disorder of the Jews, and by the name he assigns to it, gonorrhœa, or a flux of the semen, that he was ignorant of the true nature of the disorder, his description nevertheless informs us, that our disorder was contagious, and that it was propagated by coition. Hence the legislator laid down wise and severe laws to prevent this communication; we will enable the reader to judge of this for himself by quoting the passages. They are to be found in Leviticus, chap. xv. The English translators of the Bible having, from laudable motives, and for the sake of delicacy, translated the expression, flow of the semen, by *issue*, we shall respect their motives, and give the text as it stands in the Latin Vulgate, which Hebrew readers will perceive affords the true sense of the original.

Verse 2. *Vir qui patitur FLUXUM SEMINIS, immundus erit.*

3. *Et tunc judicabitur huic vitio subiacere, cum per singula momenta adhæserit carni ejus, atque concreverit fædus humor.*

4. *Omne stratum in quo dormierit, immundum erit, et ubicumque sederit.*

5. *Si quis hominum tetigerit lectum ejus, lavabit vestimenta sua; et ipse, lotus aquâ, immundus erit usque ad vesperum.*

6. *Si sederit ubi ille sederat, et ipse lavabit vestimenta sua; et lotus aquâ, immundus erit usque ad vesperum.*

7. *Qui tetigerit carnem ejus, lavabit vestimenta sua; et ipse, lotus aquâ, immundus erit usque ad vesperum.*

8. *Si salivam hujusmodi homo jecerit super eum qui mundus est, lavabit vestimenta sua; et lotus aquâ, immundus erit usque ad vesperum.*

9. *Sagma super quo sederit, immundum erit.*

10. *Et quidquid sub eo fuerit qui fluxum seminis patitur, pollutum erit usque ad vesperum. Qui portaverit horum aliquid, lavabit vestimenta sua; et ipse, lotus aquâ, immundus erit usque ad vesperum.*

11. *Omnis quem tetigerit qui talis est, non lotus antè manibus, lavabit vestimenta sua, et lotus aquâ, immundus erit usque ad vesperum.*

12. *Vas fictile quod tetigerit confringetur, vas autem ligneum lavabitur aquâ.*

13. *Si sanatus fuerit qui hujusmodi sustinet passionem, numerabit septem dies post emundationem sui; et lotis vestibus et toto corpore in aquis viventibus, erit mundus.*

31. *Docebitis ergo filios Israël ut caveant imunditiam, et non moriantur in sordibus suis.*

From these passages it appears evident to me, that this discharge was not a real gonorrhœa, or flow of semen, as the text expresses it, but a blennorrhagia, or what modern authors call a *virulent gonorrhœa*, although the law which obliged the patient to keep himself clean was good in all cases, and particularly in a warm climate, and for a people but little accustomed to the cares of cleanliness, yet it would have

been absurd and inhuman, if the disorder had been a discharge of semen, to oblige persons to avoid the company of the patient, and to oblige the patient himself, not only constantly to wash the parts affected, but also his hands, and the tools or instruments he uses, particularly in climates where water is scarce. It appears to me more probable, that this discharge was of an acrid and contagious nature, probably of the nature of leprosy, or of the elephantiasis or leontiasis of the Greeks, and that it was consequently wise and proper to oblige the woman who cohabited with such a person, to keep as much as possible the genitals in a state of cleanliness. The legislator, or the author of this book, not knowing the seat or the nature of this discharge, but perceiving that it was a puriform matter flowing from the urethra, imagined, as most medical men did, until twenty or thirty years since, that it was corrupted semen which flowed from the penis, and he denominated it accordingly. I find a new probability in support of my opinion, in the obligation that he imposed on the patient, after the discharge had ceased and disappeared, to wash his clothes and his body in cold water, during seven days in succession. In fact this circumstance supposes, that the disorder was in general curable, and that it finished by disappearing of itself; as we frequently find blennorrhagias do, whilst this happy termination seldom or perhaps never takes place in a real gonorrhœa, or discharge of the semen.

The duty imposed by the same legislator on women, during and after their menses, not only appears to me a wise and necessary law in a warm country, but I think it very proper even in our European climates; for it is certain that the menstrual discharge in women who apparently are very healthy, is frequently blended with such acrid humours, that their application on the genital parts of a sound man occasions discharges or ulcers, but very different from those produced by the syphilitic virus. I have seen several well-authenticated proofs of it; and it is probable that the issue opened by this emunctory to these acrid and injurious humours is the cause that women are rarely subject to the gout, &c. I pray the reader to bear in mind what I state here, with what he will find in the third chapter of this volume.

I find nothing in the disorder of Job that can be applied to the syphilitic disease, notwithstanding all that Don Calmet may say.

In Job's disorder: *Cadat super caput Joab et super universam domum patris ejus, nec deficiat de domo Joab* FLUENS et LEPROSUS. Cap. ii. ver. 7. &c. The word *fluens* might incline one to believe, that he had had a discharge from the urethra and a morbid affection, which, according to all appearances, I should denominate a *leprous blennorrhagia*.

GREEK AND LATIN AUTHORS.

THE disease to which the Scythians were subject, according to *Herodotus* (Clio) and *Hippocrates*, which was denominated *morbus femineus*, or the female disorder, seems to have been a real gonorrhœa, or a disorder of the testicles, which by degrees rendered the patients effeminate and impotent. *Hippocrates* further treats, in his book *De Naturâ muliebri*, on the method of curing ulcers, burning and itching of the genitals; and remarking a year in which the *putredines pudendorum*, *stranguriæ*, *dysuriæ*, &c. were more common, he thought they belonged to the epidemic disorders. He speaks also in his *Epidemics*, book vii. of some remedies against ulcers and warts of the genital parts.

In his book *De Morbis mulierum* he mentions ulcers of the uterus and of the suppuration of the inguinal glands, and he attributes the cause of these disorders to the suppression of the menses.

CELSUS, lib. iv. cap. 21. mentions a discharge of semen, which was neither excited by coition nor by dreams, *nimia profusio seminis sine venere et sine nocturnis imaginibus*, that is to say, a real gonorrhœa, which at length becomes fatal, in causing by degrees consumption; and lib. vi. c. 18. where he speaks of ulcers of the genital parts, he says: *Solet etiam interdum ad nervos ulcus decurrere*, &c. The inflammatory symp-

toms of this disorder, such as he describes them, and the method of treatment that he recommends, sufficiently explains its nature, and leaves no doubt of its being a real blennorrhagia, or what is commonly called a virulent gonorrhœa.

JUVENAL, Sat. xi. and MARTIAL, principally in lib. vii. and ix. speak of excrescences and ulcers of the genitals: *marisca, ficus, ulcus acre, pustulæ lucentes, sordidi lichenes*, as disorders communicated by impure coition.

DIOSCORIDES recommends remedies for *rhagades, condylomata, maligna ulcera vulvæ, tubercula genitalium, et vulvæ exulcerationes*.

SCRIBONIUS LARGUS (*De Composit. medic.* edit. Stephan, c. 89 and 90.) recommends remedies for rhagades, condylomata, and warts of the genitals, and chap. 94. remedies *ad veretri tumorem, ulcus sordidum et cancrum (gangrænam) veretri*.

SEXTUS PLACITUS, papyriensis, (*Parabil. medicament. Script. Antiq.*) speaks of remedies for *bubones seu tumores ad inguina, carbunculos in veretro, ficos in ano, rhagades, phymata, callos in veretro*.

LUCIUS APULEIUS (*De medic. herb.*) mentions medicines *ad veretri dolorem et tumorem; ad tumorem et dolorem inguinum; ad condylomata; ad veretri pruriginem*.

In Pliny the Younger, lib. vi. epist. xxiv. we find a remarkable anecdote of a disorder or rottenness of the genitals: *Maritus, ex diutino morbo, circa velenda corporis, ulceribus putresce-*

bat. It appears that this disorder was then considered incurable.

The ulcers of the genital parts of Herod, mentioned by Josephus, seem to have been connected with a universal disorder of the body, (probably elephantiasis,) the nature of which we are not acquainted with.

The disorder of *Galerius Maximinus*, mentioned by EUSEBIUS, seems to have been of a similar kind.

GALEN (*opera per J. Cornarium*) speaks of *phimosis, paraphimosis, rhagades, condylomata, bubones, phymata purulenta acrochordones, thymi, myrmeciae ad inguina, tubercula in pudendis, ulcus testiculorum*.

ORIBASIIUS (*Synopsis*) says : *Thymus est ulcus asperum et squalidum carne excrescens in ano et pudendo ; ficus ani pudendorumque ulcera ; testiculi ulcere aphthæ simili correpti. — Ad pudendum intumescens ; ad dolores scroti pudendique. — Ulcera scroti ; ulcerationes, mordicationes et pruritus vulvæ.*

MARCELLUS EMPIRICUS, (*De Medic.*) physician to the Emperor Theodosius, speaks of *rhagades, condylomata ; tumor paniculæ, dolor inguinum*. — He recommends medicines to prevent the ulceration of buboes. — *Item : Ad veretri tumorem ; ulcus sordidum in pene ; cancrum. — Ad ulcera veretri. — Ad tumores et dolores testiculorum remedia. — Ad carbunculos, et myrmecias in veretro. — Ad veretri et testiculorum ulcera ta-*

bida et humida. — Ad clavulos et ulcera veretri. — Ad carbunculos veretri serpentes ; in veretro summo clavus habens callum purulentum.

ÆTIUS (*Tetrabibl.*) speaks of, rhagades ; — Condylomata ; *thymus morbus frequens ad sedem et pudenda. — Thymi feri dicti sunt duri-ores, scabriores, fæculenti, colore lividi, dolorem punctionemque inferentes præcipuè attactu, sunt insânabiles ; non excisi à radice, sed amputatione totius membri auferendi.*

De Pudendorum thymis, ex LEONIDA, ibid. lib. xiv. cap. 12. Oriuntur in ipsâ sede, vel in fistulâ penis, vel in præputio. — For ulcers he recommends excision, and afterwards the application of caustic. — He again speaks of *Præputii rhagades, ulcera sordida, et pudendorum spontanea exanthemata ; remedia ad pudendorum depascentias (erosiones) ; ad pudendorum carbunculos ; ad urinarii meatûs ulcera ; carbunculosa vulvæ ulcera. Sordida vulvo ulcera. — Thymus in alis vel in ipso pudendo, vel in ore uteri, vel in collo ; pudendorum formicæ (ulcera) ; condylomata et rhagades ad vulvam et circa os uteri.*

Bishop PALLADIUS, who lived under the reign of Theodosius the Younger in the fifth century, relates a curious anecdote of a hermit of the name of Heron, who had till then led a very virtuous life. The following are his words, which I copy from the edition in my possession.*

* *Palladii Episcopi Helenopoleos, Historia Lausiaca. Lugd. Batav. ex Off. Lud. Elzeviri, 4to. 1616. This edition*

At length Heron, seized by the influence of an evil genius and transported like a devouring fire, could not remain shut up in his cell. He set off suddenly for Alexandria; the will of God called him thither, and, according to the proverb, *one nail drives another*. In fact he soon forgot his duties, which would in the end have led, in spite of himself, to his salvation. He frequented the theatres and the hippodromes, and passed his life in public-houses. From the excess of good cheer and wine, he fell into the abuse of women and the most filthy libertinism. Having resolved to sin, he cohabited habitually with a dancing girl, and told her of the pangs of love (or wound) that tormented him. In the midst of all this there came an *anthrax* on the glans. The dis-

is Greek, and edited by *J. Meursius*. The anecdote is p. 81. under the title of *Ἡερί Πρωτος*.

.... Οὗτος τελευταῖον τῇ τοῦ πονερεῖς δαίμονος ἐνεργείᾳ λεβθεῖς, ὡς ὑπὸ σφοδρστάτῃ τυρὸς ἐλαυνόμενος ἐν τῇ κελλημένῃ αὐτοῦ καθῆς· θῆναι οὐκ ἠδυνήθη· ἀπελθὼν δὲ εἰς τὴν Ἀλεξανδρείαν τάχα καὶ τοῦτο κατὰ θεῖαν οἰκονομίαν τὸ δὴ λεγόμενον, ἤλω τὸν ἥλον ἐξέκρεσεν. Περίεπεσεν γὰρ ἐκουσίως τῇ ἁ διαφορίᾳ. Εἰς ὕψερν ἀκέρσιον εὐζάμενος σωτηρίαν. Παρέβαλεν γὰρ καὶ θεάτροις, καὶ ἵπποδρομίαις, καὶ τὰς διατριβὰς εἶχεν ἐν κατωλείοις. Οὕτως δὲ γαστριμαργῶν καὶ οἰνοφλυγῶν ἐνέπεσεν καὶ εἰς τὸν βόρβορον τῆς γυναικείας ἐπιθυμίας. Καὶ ὡς ἐσχέπετο ἀμαρτῆσαι μιμᾶδε τινὶ προσομιλῶν συνεχῶς τὰ πρὸς τὸ ἔλκος ἑαυτοῦ διελέγετο. Τάτων ἔτιως ὑπ' αὐτῆς διαπραττομένων γέγονεν αὐτῇ κατὰ τινὰ οἰκονομίαν ἄνθραξ κατὰ τῆς βαλάνου. Καὶ ἐπὶ τοσούτον ἰνότησιν ἐξαμνησιῶν χρόνον, ὡς κατασαπῆναι αὐτοῦ τὰ μέρια, καὶ αὐτομάτως ἀποπεσεῖν. Ὑπερον δὲ ὑγιαῖνας καὶ ἐπανελθὼν ἄνευ τέτων τῶν μελῶν, καὶ εἰς φρόνημα θεῖον, καὶ εἰς μνήμην τῆς ἐβρανίας πολιτείας, καὶ ἐξομολογησάμενος πάντα τὰ συμβεβηκότα αὐτῷ τοῖς ἀγίοις πατράσιν, ἐνεργῆσαι μὴ φθάσας ἐκοιμήθη μετὰ ὀλίγας ἡμέρας.

order became so serious in the space of six months, that his parts corrupted and fell off of themselves. At length having been cured, and returning home deprived of the member that had caused his fall, he returned to God and to the remembrance of the kingdom of heaven. He confessed before the holy fathers all that had happened to him, and not suffering himself in future to be surprised by the devil he fell asleep (died) a few days after.*

PAULUS ÆGINETA (*De Re medicâ*, cap. iii. and iv.) *Ulcera pudendi et circa sedem.*—*Nomæ seu ulcus serpens pudendi.*—*Rimæ et sordida circa coronam ulcera et maxime cum detrahare præputium non possunt.* In another place he speaks of the universal ulcer, or what we now call *elephantiasis*, or the black leprosy, lib. iii. cap. 59. *Si verò in cole intrà pudendi foramen in conspicuum ulcus fiat, cognoscitur ex eo quod pus et sanguis evacuatur citrà mictionem*: that is to say, “If an ulcer is formed in the urethra, it may be known by the discharge of a purulent matter or blood, which the patient loses without making urine.” — Not one of my readers can mistake the disorder, from this description, to be any other but what is commonly called a gonorrhœa.

* A disorder very similar to that of Heron’s shewed itself some years since in the north of the United States of America; the vulgar called it the *black dog*. This disorder, which attacked the virile member, made such rapid ravages, that the parts affected corrupted and fell off in 48 hours after the patient first perceived the infection.

The same author mentions remedies: *Ad dolores in pudendo; ad tumidum pudendum; ad verrucas in pudendis, thymos appellatas; ad rimas inflammatas et ulcerationes sedis cum fervore et morsu; ad callosas extuberantias; circa uteri osculum fissuræ fiunt.* — *Quandòque contingit fissuras diuturnas in condylomata maturi; verrucæ et fornicaria seu verrucæ latum fundum habentes; ad cancrrosa et maligna et ad rubosa sedis ulcera, itemque ad inflammationes in pudendis et testibus.* — *Thymi seu carnosæ eminentiæ in glande vel præputio: condylomata in ano solùm loco differunt ab eo quod in mulieribus pudendis est.* Lib. vi. c. lxxx.

CLEOPATRA (in Collect. Gynecior.) mentions remedies: *Ad ulcera incorpore matricis ex prurigine; ad ulcera et vitia vulvæ sordida vel putrida.* — *Ad vulnera et calefactiones et tumorem et dolorem matricis; ad vitia juxtà anum; ad condylomata.*

MOSCHION (in Collect. Gynecior.) says: *In pinnaculis et in sinu muliebri, et in orificio vel in collo matricis, clavi nascuntur.*

ACTUARIUS (Method. medendi, l. iv. c. viii.) says: *Nonnumquam in internâ penis parte exiguum tuberculum oboritur, quod, dum disrumpitur, sanguinem ac exiguum puris effundit: quare quidam arbitrantur ex profundo ea prodire, citràque rationem metuere cæperunt; verùm res ex dolore penis deprehenditur.* — He adds, bleeding and a cooling diet soon relieve the patient; and he continues: *Quod si vitium moram traxerit et vulnus altius pervenerit, &c.;* that is to say, “if

the disorder continues a long time, and if the ulcer extends deeper," he recommends injections, and the use of baths, and to abstain in eating and drinking from all things that are acrid or heating. I would ask, whether the most enlightened physician of the present day could give more rational precepts for treating a virulent gonorrhœa.

NICOL. MYREPSUS (*Medic. opus*) mentions: No. 81, *Pudendorum putredines et fluxiones*. No. 83, he recommends a powder *ad pudenda fluxione laborantia*; and he adds: *His enim cicatricem inducit, valdè bonus est*. He also speaks of remedies: *Ad ulcera in pene, condylomata, verrucas; ad carbunculos pudendorum; ad pudenda ulcerata et rimas; ad mulierum ulcerosas intertrigines; ad nomas potissimum pudendorum; — Pulvis ad ulcera pudendorum, et pudendorum putredinibus et fluxionibus accommodatus*.

I will pass over what the Arabic authors, and those who have followed them, have transmitted to us on the disorders of the genitals, which several of these writers decidedly affirm to be contagious, and produced or communicated by coition, but I cannot pass over in silence the following facts.

Dr. THIENE, a very distinguished physician of Vicenza, has communicated to me an interesting discovery made by the Abbé Jennari, a celebrated antiquary of Padua, of a famous law-suit, in the fifteenth century, (1459,) in which a woman demanded to be divorced from her

husband, for a disorder then known in Italy under the name of *pestis inguinaria* (bubo), with which he was affected on the left side.

ASTRUC, in his "*Traité des maladies vénériennes*," has communicated to us the manuscript statutes of the brothels at Avignon, (*De disciplinâ lupanaris publici Avenionis*), made in 1347 by Queen Jeanne I., in which we find, after other regulations, Art. IV., which is thus expressed: "The queen wills, that every Saturday, the *baillifs* wife, and a surgeon proposed by the consuls, visit every courtizan, and if he find any one who has contracted the disorder arising from fornication, she shall be separated from the others, to remain apart, in order that she may not go astray, that the disorder may be avoided which the young men might take."

Here is not only a positive and very instructive part for the physician, but at the same time, on the part of a queen, a care for the public health which would do honour to legislators of the most enlightened age.

LANFRANC, and more particularly SALICET, mentions, in the *thirteenth* century, pustules, ulcers, and chancres of the glans, which appeared "*post coitum cum fœdâ muliere*." We find in the *fourteenth* century, that GORDON, ARNAUD DE VILLENEUVE, and particularly GUY DE CHAULIAC, who wrote about the middle of that century, mention excoriations, burning, corrosive, and putrid ulcers coming *propter decubitus cum muliere fœdâ*.

BECKET has noticed, in the Philosophical Transactions, many very remarkable facts. He says, In an old manuscript in my possession, written A. D. 1390, is a receipt for "*the burning of the penis*," and for sanious ulcers; and in another MS. written about fifty years after, in which is a receipt for *the burning of this part by a woman*, he also relates two remarkable passages in the English statutes concerning "*bad places*." The one of 1163 says, "Let no stewkeeper harbour a woman who has the dangerous disorder of *burning*;" and that of 1430, written on vellum, and preserved in the archives of the Bishop of Winchester, begins thus: "Here begins the ordinances, regulations, and customs, as well as for preserving the life of man, as for preventing the misfortunes and inconveniences of it." There is a law fining a stewkeeper one hundred shillings, (a large sum for those times,) who shall keep in his house women having this abominable disorder, (*malum nefandum*,) or, as it is afterwards translated, "being affected with *burning*."

I might have related a greater number of similar proofs, but I thought it was not necessary to extend the subject farther. Those of my readers who desire to be more profoundly instructed on this point, will read with pleasure the Latin *Excerpta* which Dr. HENSLER has published in his "History of the Venereal Disease," written in German, as well as the work already cited, *Supplementum in Collec-*

tionem Luisini auctorum de Lue Venered. Auct. GRUNER, M. D. et Prof. in folio.

When I had terminated this Historical Sketch on the disorders of the genital parts amongst the ancients, I was well persuaded that the subject was by no means exhausted, and that continuing these researches probably a rich harvest might be gathered, especially in Italy, the most enlightened country of Europe at that period.

I consequently wrote, in 1802, to my friend Mr. FORTIS, librarian at *Bologna*; and I begged him to examine whether, in the library of that city, there were not some manuscripts, or some old printed book on the venereal disease, or on the disorders in general that were prevalent in Italy in the fifteenth century. Hoping to have gone to Italy myself to make ulterior researches on this and other subjects, I have hitherto deferred publishing his answer, which is as follows :

“ I have found in the library confided to my care a Treatise on Surgery, of which the edition is not even known to any of the bibliographers I have been able to consult. It was printed at Venice, in 4to. in 1474, by Master Philip de Pierre. Its author is Master *G. de Piacenza*, (which we know to be the same as *G. de Salisetto*.) It is written in the Venetian patois of the time. In the 4th chapter, he speaks of tumours of the glands of the groin, which sometimes happens when a man has a disorder in the penis, from having slept with an

infected woman, or from other cause, (*e ad- vien a la fiada quando l'omo a mal à la verga, per una femena fedada* (infected) *et. per altra cackone*). These are his proper words. In chapter 47. where he speaks *de le pustule, e sasure, le qual vien in la verga et cerca el prepucio*. "Of pustules and ulcers which come in the penis and round the prepuce." He positively advises those who would wish to protect themselves from them, to wash and rub well the penis with cold water after coition with an "unsound whore," because the washing defends the penis from corruption, (*La lavaxone con aqua freda, el adoso forbirse* (to rub softly), *de quella drieto lo corato* (coition) *con fetida femena, over meretrice, defende la verga de courcione*).

M. Fortis adds, It is very possible that something amongst the papers of the library may discover some other proof of the venereal disease being anterior to the discovery of America. He adds, The work in question does not announce great genius; there is, however, a sort of rational distribution of the work. The first book treats of disorders on the surface of the human body, arising from internal causes; the second, on wounds and contusions from without; the third, in the manner of treating different dislocations; the fourth, of anatomy generally, and of the members that must be cut or burnt, with the manner of operating in such cases; the fifth, on cauterizations, and the instruments to be employed for them; the last

chapter is consecrated to the medical properties of some plants and mineral preparations.

In his second letter to me, he says, *PACIFICUS MAXIMUS*, poet and man of letters, of the fifteenth century, born at *Ascoli*, in the marche of *Ancona*, and died at *Fano*, in the Duchy of *Urbino*, about 1500, aged one hundred years. There was preserved at *Perugia* a few years since, a very fine manuscript of his Latin poetry, which is supposed to have been written with his own hand, at the time he was professor of the ancient college of *la Sapienza*. The first printed edition of these Poems bears the date of 1489 ; he was then aged ninety, and very repentant for the free verses that he had suffered to go abroad in his youth, and which, however, he had not the courage to suppress at that period. It is in these verses, of which we can only fix the date between the years 1430 and 1460, that *Pacificus* gives a very circumstantial description of the disorder with which he himself was afflicted. In an elegy which he addresses to *Priapus* (*Hecatelegii*, lib. iii.), in the fourth distich he apostrophises the god :

Hortorum custos, tu solus, summe tuorum
Arte salutiferâ, sancte Priape fave !

He prays him to succour him as Neptune succours the mariners, and Vulcan those who have recourse to him when a house is on fire.

Tuque meum si non properas sanare Priapum,
Decidet ; heu, non hoc nobile robur erit.

I shall no longer find any young girls, says he, who will have any thing to do with me.

Si cadet hic, non me tristior alter erit.

Me miserum ! sordes quas Marcidus ore remittit !

Ulcera quæ fædo Marcidus ore gerit.

There is therefore no doubt that gonorrhœas, or acrid discharges, ulcers, warts, condylomata of the genital parts, swelling of the inguinal glands, &c. have existed amongst different nations from time immemorial. But what was the source and what the causes of these disorders? What is the virus or acrimony that produced these blennorrhagias, ulcers, and tumours of the inguinal glands? Ancient and modern authors have left us in this respect in profound ignorance. I have endeavoured in the course of this work to determine some of these causes; and I hope that the experiments and observations I have communicated will serve, if not completely to elucidate this new subject, at least to clear away some of the difficulties attending this confused and obscure matter.

I think I have demonstrated, that any virus or acrimony whatsoever, applied to the urethra of man, may and ought, according to the constant and general laws of the animal economy, to produce in it irritation and inflammation, and consequently a more abundant secretion from the

mucous membrane, or, in other words, a discharge; exactly as a grain of sand, or any acrid matter falling into the eye, produces in it an irritation, and a more abundant secretion of the lachrymal humour. In like manner, if any virus or acrid matter whatever be applied to the genitals, or any other part of the body, and that it remains there a sufficient length of time to produce its action, it will excite either an irritation, a discharge, or an ulcer. If this matter be absorbed by the lymphatic vessels, and carried to the neighbouring lymphatic glands, it will, if sufficiently acrid to irritate them, produce swelling, inflammation, &c. It follows from these considerations, that the said discharges, ulcers, or tumours, must vary according to the nature of the virus or acrid matter that has been applied, or of the cause which has produced them. I have made some of those causes known, and endeavoured to determine their nature. I have consequently divided bleennorrhagias into syphilitic, herpetic, gouty, &c. and the ulcers into syphilitic, scorbutic, scrofulous, herpetic, leprous, mercurial, asthenic, &c. This is all that is at present known on this matter. We are very far from having exhausted the subject, or discovered or determined all the causes which produce, or are capable of producing, those local maladies in the genitals; but this may and ought to suffice, until the united skill and learning of the most

eminent physicians and surgeons of Europe shall throw further light on this interesting subject, enable us to distinguish the different species of these disorders, and point out the means of curing them on more rational and less empirical principles.

CHAPTER II.

HISTORICAL SKETCH OF THE SYPHILITIC, OR WHAT IS CALLED THE VENEREAL DISEASE.

Hoc, ut potero, explicabo; nec tamen, quasi Pythius Apollo, certa ut sint et fixa quæ dixerò, sed ut homunculus unus è multis, probabiliora conjecturâ sequens.

CICERO, TUSC. QUEST

IN the preceding chapter, we have considered the origin, nature, and symptoms that appear to have affected the genital parts of both sexes; in all ages, and in all climates. We have shown, that these local disorders, for the greater part, were caused by an acrimony, or the application of some virus, to these organs; and in the subsequent chapters, we have in consequence distinguished them into different species, according to the causes which produced them. We have most particularly considered the disorders produced in these parts, by that specific virus which we now call *sypilitic* or *venereal*. In this

second chapter, we shall treat of the venereal disease, more properly called syphilis; that is, of the symptoms, the effects, and nature of the virus that produces this disease; either in the general system of the body, or in the whole animal economy.

We find no trace of this disorder, or rather of this aggregation of symptoms, that properly constitute the syphilitic disease; in either the Greek, Latin, or Arabic authors. Its first appearance in Europe, according to the unanimous testimony of authors who have written, or left us some document respecting this disorder, dates from the close of the fifteenth century. Although uncertain as to the exact period or the year, as well as the place where it made its first appearance; all the contemporary authors, in general, agree in fixing from 1490 to 1520, the period in which this disorder raged with the most destructive violence: they all agree in considering it as a cutaneous, contagious, new and unknown disorder, very different from the *leprosy*; a disorder very general at that time; for nineteen thousand hospitals, in Christendom, were then filled with patients labouring under it. Every author of these times agrees that the characteristic signs or symptoms of this new disorder, were pimples or pustules that did not separate, and hideous excrescences as large as acorns on the skin, particularly in the face, raw eating ulcers in the throat, exostoses, and nocturnal pains in the bones.

Alexander Benedictus, a physician who wrote in 1497, adds, that he had seen patients who lost their sight, their nose, hands, feet and other members. It is worthy of remark, that although many authors, since the year 1500, make mention of the affection of the genital parts, and say the disease was more generally (*ut plurimum*) communicated by coition; not one author, before this time, points out the affection as essential or characteristic of this disease.* All look upon it as pestilential and contagious, *without coition*, and even without any direct contact.

Schelling, a German physician, one of the first who wrote on this disorder, whose work † appeared in 1494 or 1495, positively asserts, that this is a very subtil poison, and becomes easily contagious, not only by the air ‡, breathing, or remaining in the same room, but even by the clothes of the infected persons, and

* This is the less surprising, as we have shown, in the preceding chapter, that the ulcers, buboes, phimosis, condylomatae and warts on the private parts, were all diseases well known to the ancient Greeks and Romans, as well as in the following ages; which we see particularly in the works of *Lanfranc* and *Salicit* in the thirteenth century, and in those of *Gordon*, *Arnauld de Villeneuve*, *Guy de Chauliac*, and *Hochner*, in the fifteenth century.

† Consilium in *Pustulas malas*, morbum quem malum de Francia vulgus appellat. *Heidelbergæ*, in 4to.

‡ This idea or fear of the infection was entertained more than thirty years after; for in 1529 Cardinal Wolsey was accused in the House of Lords of having whispered in the king's ear; it being well known, that he (Wolsey) was infected with the venereal disease. Hume.

expresses fears that one may even be infected in public baths.*

Gaspard Torella, bishop of St. Fuste, born at Valencia in Spain, who was physician to Pope Alexander the Sixth, says positively in his work "*Dialogus de dolore, cum tractatu de ulceribus in pudendagra evenire solitis*," p. 2, 3, &c., (printed at Rome 1800,) *non enim est qui ignoret quòd hæc maligna et contagiosa ægritudo, ob longitudinem temporis à mente hominum deleta erat.* A little further he adds: *Valentini, Catalani et Arragonenses, post longam librorum indagati-onem, ipsum morbum SEMENTI vocaverunt, eo quia in duodecimo libro Christiani, edito à magistro Francisco Ximenes, scriptum invenerunt similem morbum aliàs orbem invasisse.* He however thinks, that Ximenes then meant the leprosy; and still it is no less true that the Spanish physicians, *after long enquiries*, were persuaded of the high antiquity of the *pudendagra*.

The same author observes, in his treatise, written in 1500, that this disease was generally propagated, in his time, by immediate contact only, and that the part which came in contact was the first affected, whether the mouth, the face, or nurses' breasts: this evidently shows that in the first apparition of the *Syphilis*, they had observed, or at least looked upon this disease as contagious, from the air alone, without any

* It is most probably this opinion, that has induced people to neglect the use of baths in Europe; which however is one of the most powerful remedies that can be administered in this disorder.

immediate contact; and this also proves that the disease was often communicated by other means than coition. But we have still a more positive proof of this last assertion.

Natalis Montesaurus, who wrote in 1497 and was himself afflicted with the disorder, ascribes its origin to the conjunction of *Saturn* with the head of *Aries*. He, too, mentions nothing of the genital parts being affected, but principally talks of the nightly pains in the bones.

Bartholomæus Montagnana, in 1498, (*Consilium medicum pro illust. et reverend. episcopo et Hungariæ vice-rege; vide in collect. Luisini*,) says the disorder was new and unknown; he recommends evacuations and *moderate coition* to the sick bishop. Nothing can prove more clearly, that the disorder existed frequently without any affection of the genitals.

JAC. CATANEUS (*Tractat. de morbo gallico*, in 1504,) is the first that says the syphilitic disease lies latent for more or less time, in some subjects, “for years and months,” (*ad menses et annos*.)

PIERRE PINCTOR (*De morbo fædo et occulto, his temporibus affligente: Romæ, 1500, in 4to.*) says it was a new disorder that first appeared in 1483.* He speaks of three remarkable patients

* “Pro verâ notitiâ hujus capituli dignum esse dicimus, quòd hic morbus cœpit exordium anno 1483, cap. iv. et cap. xiii. Contagiosus morbus est. Nam unus homo infectus dicto morbo potest inficere homines conversantes et stantes cum infecto, etiamque potest inficere aërem cameræ et domum ubi habitant, et sic pertransit de uno homine ad

he had cured with mercurial frictions ; the *Cardinal of Segovia*, the *prebendary Centez*, and the *Pope Alexander the Sixth*. He mentions dreadful nocturnal pains in the bones, and pustules over the whole body ; but says nothing of the genitals.

GEORGE VELLA (*Consilium medicum pro morbo gallico*, 1505,) says, that the disorder was communicated by coition, but he had this remarkable expression: "A woman maybe infected and communicate the disorder to several men, without having any appearance of it herself."

Macr. Anton. Coccius Sabellicus, a renowned historian in 1506 who died of this disease, says, in his *Rhapsodia historica*, that the disorder began by pustules all over the body which afterwards became hideous ulcers : he too says nothing of the privy parts.

JOANN. BENEDICTUS (*Tractatus de morbo gallico*, 1508, in 4to.) says, that the disorder commenced in 1493, that it was communicated by contact, kisses, nurses, and coition. He attributes its cause to the conjunction of the planets, and very particularly observes, that it was no longer then so violent as in the beginning.

alium, et de unâ domo ad aliam ; perducitur ille aër maliciosus per totam civitatem, et inde inficiuntur homines illius civitatis ex hoc contagio : tamen dicimus ipsam ægritudinem magis contagiosam esse propter coitum cum muliere habente hunc morbum, et maximè illius cum quâ homo habens hunc morbum coërit." This passage explains in a striking manner the sepulchral inscription which will be cited *infra*.

ULRICH VAN HUTTEN (*Libellus de Guajaci medicina et morbo gallico: Moguntiaë*, 1519, in 4to.) makes the same observation that the symptoms of this disease were most dreadful on its first appearance. His expressions are very remarkable. He says, in fact, that the disorder was horrible on its first appearance, that it can scarcely now (in 1519) be looked upon as being of the same nature. It was attended with ulcers as large and of the same shape as acorns; they were hard and prominent, yielding a very corrupt and foetid matter: the smell of which alone made one fear having caught the disease.*

Having caught the disease himself, and after trying mercury and every other known remedy in vain, he was at length radically cured by a decoction of guaiacum: a discovery due to *Hernandes d'Oviedo*, who had learnt its efficacy from the indigenous inhabitants of *Hispaniola*.

To give a more exact idea of the dreadful symptoms that attended the syphilis on its first appearance in Europe, I shall join to *Van Hutten's* description that left us by *Fracastor* in his beautiful poem, under the title of *SYPHILIS sive morbus gallicus*, 1521.

* “ Quippe tantâ fuit, cùm primum oriretur, fœditate, ut qui nunc grâssatur vix illius generis esse putetur. Ulcera in quercæ glandis speciem et magnitudinem, aspera, exporrecta, spurcus ab his profluens humor; fœtor verò tantus exhalans, ut cujus nares contigisset odor ille, infici mox crederetur.”

Protinus informes totum per corpus achores
 Rumpebant, faciemque horrendam et pectora fœdè
 Turpabant ; species morbi nova : pustula summæ
 Glandis ad effigiem, et pituita marcida pinguis,
 Tempore quæ multo non post adapertha dehiscens,
 Mucosâ multum sanie taboque fluebat.
 Quin etiam erodens altè, et se funditùs abdens
 Corpora pascebat miserè, nam sæpiùs ipsi
 Carne suâ exutos artus, squallentiaque ossa
 Vidimus, et fœdo rosea ora dehiscere hiatu,
 Ora, atque exiles reddentia guttura voces.
 Tum sæpè aut cerasis, aut Phyllidis arbore tristi,
 Vidisti pinguem ex udis manare liquorem
 Corticibus : mox in lentum durescere gummi.
 Haud secùs hac sub labe solet per corpora mucor
 Diffluere : hinc demùm in turpem concreescere callum.
 Unde aliquis ver ætatis, pulchramque juventam
 Suspirans, et membra oculis deformia torvis
 Prospiciens, fœdosque artus, turgentiaque ora,
 Sæpè deos, sæpè astra, miser, crudelia dixit
 Interea dulces somnos, noctisque soporem
 Omnia per terras animalia fessa trahebant :
 Illis nulla quies aderat, sopor omnis in auras
 Fugerat. His oriens ingrata Aurora rubebat ;
 His inimica dies, inimicaque noctis imago.
 Nulla Ceres illos, Bacchi non ulla juvabant
 Munera, non dulces epulæ, non copia rerum ;
 Non urbis, non ruris opes, non ulla voluptas.

Jean Lemaire, a French poet, born in 1473, and who died in 1524, gave a graphical description of the disorder in his poem *De Cupido et d'Atropos*.

Mais en la fin, quand le venin fut meur,
 Il leur naissait de gros boutons sans fleur,
 Si très-hideux, si laids, et si énormes,
 Qu'on ne vit onc visages si difformes.

Ne onc ne reçut si très-mortelle injure
Nature humaine en sa belle figure.

Au front, au col, au menton et au nez,
Onc ne vit-on tant de gens boutonnez.

.

Mais le commun, quand il la rencontra,
La nommait Gorre, ou la Vérole grosse,
Qui n'épargnait ni couronne ni crosse.

Pocques l'ont dit les Flamands et Picarts,
Le *Mal français* la nomment les Lombards.

Si a encore d'autres noms plus de quatre.

Les Allemands l'appellent *Grosse blattre* :

Les Espagnols *la Baus* l'ont nommée.

On comparing the foregoing observations together, it is evident to me, that the syphilitic disease, on its first appearance until 1524, was in its effects, nature, or symptoms, much liker to the *Elephantiasis*, to the African *Yaws*, or to the *Sibbens* of Scotland, and the new disorder in Canada, (vide chap. xv. to xviii.) than to the mitigated syphilitic disorder, such as we see it at present in Europe.

It is a difficult, perhaps impossible thing, to fix precisely in what year this terrible disorder first made its appearance in Europe. However, supported by the authority we shall adduce presently, there is every reason to suppose, that it made its appearance about 1483, (*Pinctor* says so positively,) or in 1484, and that it began by spreading itself every where, particularly in Italy, and soon after in France during the years 1493, 1494, and 1495, as an epidemical disorder, so contagious that it was looked upon as pestilential, from the

number of persons it carried off. We know no better how and where this virus sprung up; whether it was imported from some other part of the globe into Europe, or whether it engendered by a general and unknown cause. An opportunity to discuss this subject, however intricate it may appear, a little more profoundly than has been done hitherto, presents itself now; particularly since Doctor *Hensler* has directed towards it the spirit of enquiry which renders him so superior to all who have gone before him.

RODERIGUE DIAZ DE ISLA, in his treatise *Contra las Bubas*, says, that a disorder, unknown till then, began to spread itself in Barcelona, immediately after Christopher Columbus's arrival in that city from St. Domingo, in 1493. To this he adds, that the following year, Spanish troops being sent to Naples against the French, who were besieging the city, they communicated the disease to the French, who having no knowledge of it before, called it the *Naples disease*, (*Malum Neapolitanum*). The same troops, says he, after the siege was raised, returning home through Italy to France, spread the disorder among the Italians, who for this reason gave it the denomination of *male francese* (or *morbis gallicus*).

The generality of writers, particularly *Astruc*, *Van Swieten*, and latterly *Girtanner**, strongly

* In his Treatise on the Venereal Disease, Gottingen 1789. 3 vols. 8vo. which contains the most complete history extant of all the authors who have written on this disease.

affirm, in consequence of *Diaz de Isla's* testimony, that the venereal disease was brought into Spain by Columbus and his companions, at their return from the first voyage to the Caribbee Islands (*West Indies*) in 1493; that it was communicated from the Spaniards to the Neapolitans, and from these latter to the French, who were then besieging their city; that finally the French spread it throughout Italy, and after that, through their own country, from whence it was rapidly disseminated through every other nation in Europe.

All seem to agree, that the West Indies was the original source of the venereal disease, or the pox. But this is only like the suppositions respecting tobacco; almost every one supposes, that tobacco was first known in America, and from thence was brought to Europe: although it is certain, that tobacco was known and cultivated in China, as well as in Indostan, from time immemorial.

Doctor SANCHEZ is the first who attacked the received opinion, in his *Dissertation on the Origin of the Venereal Disease*, and again in his *Historical Enquiry* into the appearance of the venereal disease in Europe, wherein he endeavours to prove the real existence of the venereal disease in Europe, before COLUMBUS had returned from his first voyage to the Caribbee Islands (*West Indies*) in 1493.

The late Doctor HENSLER, one of the most learned physicians in Germany, published, since

SANCHEZ, an account of the venereal disease; such as it appeared in Europe, at the end of the fifteenth century, (*Geschichte des Lustseuche*, Altona, vol. i. in 1783, and vol. ii. in 1789,) in which he communicates extracts from various works on the venereal disease, which are not only wanting in Luisinus's collection, but were even unknown to ASTRUC himself. This author proves, by his profound enquiries and faithful extracts from cotemporary authors, rare or little known, on the first appearance of this disease, that it is very probable the syphilis, or venereal disorder, had made its appearance in Europe before *Columbus's* return from his first voyage to America; now what renders his work doubly interesting is, that he makes a luminous distinction that had escaped antecedent authors, between the constitutional syphilis, or the syphilitic disorder of the genitals, and the local disorders of these parts that appeared in consequence of impure or foul coition, long before the appearance of the syphilis.

After deep examination of what these two authors have advanced concerning the origin and source of the venereal disease, in opposition to the opinion now generally received, that it was imported from America to Europe, I join with them in finding that opinion totally unfounded. I will give the chief reasons that induce me to participate in the sentiments of Doctor *Sanchez* and Doctor *Hensler*.

1°. *C. Columbus* returned from his first voyage,

in the month of March 1493, to *Palos*, from whence he sailed. From this city, he went by land through all Spain to Barcelona, where the court then resided. He was accompanied by some of his crew and six Indians in perfect health, for of the others he had brought from Hispaniola, one died on the passage, and he left two or three sick at Palos (of what sickness it is not stated). From this circumstance, it appears little probable that those who accompanied him were sick; and consequently, there is hardly the smallest degree of possibility, that they could have brought the venereal disease from Palos to Barcelona; unless the plague is brought, as at present, from the coast of Africa to Europe, by sailors and travellers apparently in good health; and as putrid fevers are communicated frequently at present, by persons in good health, or who, at least, are not attacked with this disorder. (See *Pringle on the Diseases of the Army*.)

2°. The remainder of Columbus's crew remained at Palos or Seville, and, what is very remarkable, no historian, to my knowledge, says the disorder had been communicated by them in those two towns. There is no authentic proof that Columbus's companions were infected with it; at least this navigator makes no mention of it in his account of the two first voyages.

3°. OVIEDO is the only cotemporary historian who asserts, and that too in an uncertain manner, that the venereal disease was a well-known and common disease in Hispaniola, and that it came

to us from thence, but he does not say it was brought to Europe in Columbus's first voyage. On the contrary he affirms in positive expressions, that it was brought in the second voyage, which ended only in the summer of 1496; and Columbus returned from his first voyage in March 1493. *Girtanner* is mistaken when he asserts, that *Oviedo* alluded to Columbus's first voyage. Be that as it will, should *Oviedo* have even said so, he deserves no credit, because he is but ill informed and little exact for an historian; besides he was a young man, not more than fifteen years old, when Columbus came to Barcelona after his first voyage.

4°. It would be also very wrong to conclude, that the venereal disease was brought from the West Indies, because it prevailed epidemically in that part of the world, just at the time Columbus re-embarked to return to Europe.

5°. Because this disease first appeared in Barcelona about the time of Columbus's return, it by no means follows, (and *De Isla* does not positively say so,) that it was brought home and communicated by his companions to the inhabitants of that city. Be it as it will, *De Isla's* assertion, that the venereal disease made its first appearance at Barcelona in 1493, deserves no confidence. In fact, it appears that this author was a physician in Seville; his book *Contra las Bubas* was only written about the year 1555; and finally what he says is not confirmed by any cotemporary writer, that is to say, who lived in

the twenty-five years subsequent to the appearance of the pox. P. MARTYR, among others, a very learned man, who was attached to the king of Spain, but then at the court of Barcelona, wrote every thing that was passing there during his residence to his friends. Now, he makes no mention whatever, in his letters of this appearance of the pox, *De Isla* speaks of. And it is to be remarked, that *P. Martyr*, who came from Rome to Spain in 1487, governor of the school founded by Queen Isabella for the young nobility of Castile, who was at Barcelona in April 1493, where he remained till November of the same year, and appears perfectly informed of all that was passing at that time, among other events, mentions Columbus's arrival, and the honourable reception he met with. Now, once more, he says not a word about the appearance of the pox at that period, no more than of its being brought and propagated in the city by the companions of this famous navigator. In another work, (*De Rebus Oceanicis*) he says not one word on the subject, although he therein treats *ex professo* of every remarkable thing in Columbus's discoveries.

6°. Now, what appears to me decisively against *M. Astruc's opinion*, &c. is the letter written by this same *P. Martyr* in April 1488; that is to say, five years before Columbus returned from his first voyage, and consequently six or seven years before the French troops sat down before Naples. In this letter he evidently makes mention of the venereal disease, such as it appeared in the

beginning. I think his letter too interesting not to transcribe here the most remarkable passage, from which it evidently appears that his friend at *Salamanca* was attacked with venereal disease or syphilis, many years before Columbus quitted Spain to undertake his first voyage.

Petri MARTYRIS, Angierii Mediolanensis, epistola
lxviii. ARIO LUSITANO, Græcas litteras Sal-
manticæ profitenti, valetudinario.

“ In peculiarem te nostræ tempestatis morbum, qui appellatione Hispanâ *Bubarum* dicitur (ab *Italīs morbus gallicus*; medicorum *Elephantiam* alii, alii aliter appellant), incidisse præcipitem, libero ad me scribis pede. Lugubri autem elogo calamitatem, ærumnasque gemis tuas; *articulorum impedimentum, internodiorum hebetudinem, juncturarum omnium dolores* intensos esse proclamas; *ulcerum* et oris *fæditatem* superaddis; miserandâ promissæ eloquentiâ; conquereris, lamentaris, deploras, etc.”

7°. To this passage I shall add a no less remarkable sepulchral inscription, which, from my best historical enquiries, appears to have a nearer connection with the venereal than any other disease, although it has been tried to give it another interpretation. This will prove indubitably, if my opinion is well founded, that the pox or syphilis was known in Europe long before C. Columbus's voyage. This epitaph is inscribed in the church, called *Santa Maria del Populo*, on the tomb of

a Roman, who died in the month of July 1485, aged thirty, of a disorder known at that time by the name of the inguinal plague, (*pestis inguinaria*).*

Now this inguinal plague appears evidently the disease called *Bubæ*, so accurately described by P. MARTYR, the *pest* or *contagion* P. PINCTOR speaks of, and the *pestilential disease* (*morbus pestiferus*) of the *mæranni* mentioned by STEPH. INFESSURA, NAUCLERUS, and FULGOSE, as I shall show presently. If this be the case, it would be evident the pox had already made dreadful havoc in 1483, 85, 88, and 92; that is to say, seven or eight years before Columbus undertook his voyage, or at least before he was returned from the first voyage.

8°. We find passages in many other authors

* MARCO ANTONII EQUITIS ROMANI
FILIO, EX NOBILI ALBERTONUM FAMILIA,
CORPORE ANIMOQ. INSIGNI
QUI, ANNUM AGENS XXX,
PESTE INGUINARIA INTERIIT,
ANNO SALUTIS CHRISTIANÆ
M. CCCCLXXXV. DIE XXII JULII.
HEREDES B. M. P.

This epitaph coincides in a surprising manner, with the date of P. MARTYR's letter, as well as with the above-mentioned passage of P. PINCTOR.

Vide *Inscriptiones romanæ infimæ ævi Romæ existentes, operâ et curâ D. Petri Aloysii Galetti, Romæ, 1760, 3 vols. in 4to. vol. iii. classe xviii. page 273, N° 7. S. Maria del Populo.*

that positively weaken Astruc's system. The following, out of LEON, *the African*, is too interesting not to find place in full here.

“When persons in Barbary are attacked with the disease commonly called the *French disorder*, they are seldom or never cured, and it ends in death. This disease generally begins with pains and swellings, succeeded by ulcers. It is very little known about Mount Atlas, in all Numidia and Lybia. As soon as a person falls ill of it, he immediately escapes, either to Numidia, or the negroes country, whose temperature is such, that they perfectly recover their health; and then they return home. I have observed this myself in many instances, where this salutary air alone effected the cure, and that without the help of any physic, or any physician.

“This disorder was not known, even nominally, in Africa, before the time when King Ferdinand drove the Jews out of Spain. Taking refuge in their ancient country, the depraved Ethiopians got connected with their wives, and thus, as from hand to hand, this pestilence was spread through the whole country, in such a manner that scarce one family escaped it. They look upon it as a certain indubitable fact, that it was brought there from Spain, and they could find no more proper name for it than the *Spanish disease*. However, in Tunis, as well as in all Italy, it is called the *French disease*. Just the same too in Egypt and Syria, from

whence this proverbial curse: *May you die of the French disease!*”*

It is now the general opinion in Morocco, that the venereal disease was unknown in their country before the period when Ferdinand, King of Castile, drove the Jews out of Spain: these latter, on their return to their country, permitted the inhabitants to lie with their wives and daughters; and from that time, the whole

* “ Si quis apud Barbaros eo morbo inficiatur qui *Gallicus* vulgò dici solet, rarò aut numquam pristinæ redditur sanitati, quin mors tandem inde consequatur. Solet autem hic morbus quodam *dolore* ac *tumore* primùm prorepere, ac tandem in *ulcera* verti. Paucis admodùm toto Atlante, totâ Numidiâ, totâque Lybiâ hoc notum est contagium. Quod si quisquam fuerit, qui se eo infectum sentiat, mox in Numidiam aut in Nigritarum regionem proficiscitur, cujus tanta est aëris temperies, ut optimæ sanitati restitutus inde in patriam redeat: quod quidem multis accidisse ipse meis vidi oculis, qui nullo adhibito neque pharmaco neque medico, præter saluberrimum jam dictum aërem, revaluerant. Hujus mali *ne nomen* quidem ipsis Africains *ante ea tempora* notum fuit, quàm Hispaniarum rex Ferdinandus Judæos omnes ex Hispaniâ profligâsset, qui ubi jam in patriam rediissent, cœperunt miseri quidam ac sceleratissimi Æthiopes cum illorum *mulieribus* hahere commercium, ac sic tandem *velut* per manus pestis hæc per totam se sparsit regionem: ita ut vix sit familia quæ ab hoc malo remanserit libera. Id autem sibi firmissimè atque indubitatè persuaserunt, *ex Hispaniâ* ad illos transmigrâsse; quamobrem, ab Hispaniâ, *malum Hispanicum* (ne nomine destitueretur) indiderunt. Tuneti verò, quemadmodùm et per totam Italiam, *morbis Gallicus* dicitur. Idem nomen illi in Ægypto atque Syria adscribitur, unde malè imprecantis proverbium: *Te morbus malè perdat gallicus!*”—Vide *Descriptio Africæ*, lib. i. versùs finem.

country was, as it were, inoculated with this dreadful disease. They call it the *great disorder*, or *the women's disorder* (*el murd el kabeer*, or *el murd En'sâh*). See Jackson's Account of Morocco, 4to. London.

9°. STEPHEN INFESSURA, who wrote his journal in Rome, says: "On the first of February, they learnt the taking of Granada by the King of Spain." In the month of June, 1493, the Spanish Ambassador complained of the Pope's having received the Moors (*Marrani*) into the city. In the month of June, 1493, the Moors were encamped in great numbers without the *Appian Gate*; getting clandestinely into the city, they brought the plague or infection with them, which since took their name, and was fatal to numbers. "In the month of October, 1493, *Cardinal Comitibus* died of the plague." In April, 1494, (that is to say, a year, or at least eight or ten months after,) the Pope wrote to the French king, (who was preparing since the beginning of the year, and even before, for his expedition,) "not to set out, because a *great pest*, or *pestilential sickness*, was then raging in Rome."*

* *Stephani INFESSURÆ Senat. Populique Rom. Scribæ Diarium urbis Romæ*, in *Eccardi Corp. Histor. medii ævi*, tom. ii.—P. 2002. Die 1. Febr. 1492, ait, venerunt nova de *partibus africanis*, qualiter Rex Hispaniæ habuerit victoriam de Granata ipsamque ceperit.—P. 2012. Aliud, quod Ambasciator regis Hispaniæ (*mense Jun. 1493*) proposuit, est, quod ex quo prædictus rex expulerat *Marranos* de imperio suo,

This plague ravaged the city during the whole year, as we see in another Journal published by *J. Burchardi*, who was master of the ceremonies.

10°. In a letter written the 4th January, 1494, to *Cardinal de Sienne*, (afterwards Pope Pius the Third,) *Pietro Delphini* gave him notice to be on his guard when he reached Rome, where the plague, although moderated, was not yet extinguished. The same person writes again, the 20th February following: *It is much to be feared that so considerable an army as the French, should not infect the country more than ever, on their way through Italy,*

tanquam inimicos fidei christianæ, quòd miraretur quòd Papa (*Alexander VI.*), qui esset caput dictæ fidei, illos recepisset in urbe. Et propterea hortatus est ut de terris Ecclesiæ subjectis illos expelleret.—P. 2013. De primâ parte, *Marrani* in maximâ quantitate steterunt extra portam Appiam apud Caput Bovis, ibi tentoria tendentes, intraveruntque in urbem secreto modo, eo quod ad custodiam portarum deputati sunt Hispani armigeri, et, ut creditur, etiam de illis, adeo ut incontinenter *pestis invaserit urbem*, mortuique sunt quamplurimi *ex peste et contagione dictorum Marranorum*; de quibus tota urbs impleta est, et, ut videri potest, non sine voluntate et permissu Papæ. Eodem mense Jun. hæc subjungit *Infessura*, p. 2015.—P. 21. Oct. 1493, mortuus fuit *cardin. de Comitibus* peste.—P. 216. April 1494. Lo Papa mandò à dire al Rè di Francia che non venisse, perchè in Roma era grande peste, e dubitava dello stato suo.—Et per lo Rè (*di Francia*) gli su rispoto che non si curava di peste, perchè, quando lui fusse morto, haverebbe posto fine allesue fatiche.

which is not yet perfectly delivered from this pestilential disease.

11°. SERACINUS, a more modern writer, observes, that the plague was common in Ancona since the year 1494.

12°. NICOLAS LEONICENE, medical professor at Ferrara, says, the disorder made its appearance in Rome the very year when there happened a great inundation in Italy. Now, INFESSURA and ALEX. BENEDICTUS tell us, that this inundation took place in October 1494.

13°. The same LEONICENE and MASSA, both very learned physicians, (the former wrote in 1497, the latter in 1532,) tell us, this disease was commonly called *the French disorder* (*morbus gallicus*), because it first broke out about the time when Charles VIII. conquered the kingdom of Naples, or else because they thought the French had brought it there; and that the physicians adopted this denomination, because it was already current among the people, rather than as a denomination expressing the origin of this disease.

14°. The testimony of NAUCLERUS is intimately connected with the above, with respect to the period 1492.*

* *Morbum pestiferum secum Hispania asportâsse Maranos testatur etiam paulò recentior Geo. Fabrîcius Rer. Germ. et Saxon, ad. a. 1492. "Ex Hispaniâ ejecta sunt 124,000 familiarum judaïcarum, quibus interdictum aurum vel gemmas è regno auferre. In itinere ex his xxx millia pestifer morbus absumpsit."*

Voyez, pour plus de détails sur ce sujet, les Excerpta latina dans l'Histoire de la Maladie vénérienne par Hensler.

15°. The following is equally decisive: BAPTISTA FULGOSE, who was Doge of Genoa from 1478 to 1493, says: "Two years before Charles VIII.'s entrance into Italy, (necessarily in 1492,) a new disorder broke out, for which the physicians neither found a name nor remedy in ancient writers. In France it was called the *Naples disease*; in Italy, the *French disease*. Fulgose give a very precise and clear description of it; and finally says, "This pestilence (*quæ pestis, ita enim visa est*) came to Italy from Spain, and to Spain from Ethiopia." (Vide *Bapt. Fulgosi factorum dictorumque memorabilium*, lib. ix.)

16°. I remark, that every author who wrote when the venereal disease first appeared, has called it *pestilence*, or *pestilential disease* (*scorra pestilentialis*); and I am inclined to think, that they gave it this name at first, not only because it attacks a great number of persons, like the real plague, (one in twenty, according to *Sabellicus*), but also because it quickly dispatched them, (*morbus erat lethalis etiam citâ morte*). Vide *Serenius apud Aquilanum*.

17°. From all these authorities, which appear far more deserving of confidence than the vague assertions of *Oviedo* and *Diaz de Isla*, it appears evident to me, that the syphilitic disease was already known and had exercised its ravages through the greater part of Europe, not only before Charles VIII.'s expedition to Italy, but even before Columbus's return from his first

voyage to the West Indies ; and that the Spanish, Neapolitan and French troops, only spread it wider, and with greater rapidity, during the war in Italy in 1494 and 1495.

This rapidity must certainly appear astonishing, for in less than two years the disorder had spread over France, Scotland, Germany, and Hungary. Its ravages began in Siberia in 1680, and more than sixty years before it had been observed at Moscow ; it consequently went round the known part of the globe in 1700.

The parliament of Paris, and in the same year (1497), the king's counsel in Edinburgh, published a proclamation, enjoyning all persons affected with the *great gore*, or *great pox*, as it was then called, to quit the capital, and retire to some place apart from every communication, and not to return, under pain of death, until they were perfectly cured. I here transcribe both the *arrêté* of the Paris parliament, and a copy of the famous proclamation of Scotland, published by Maitland, in his History of Edinburgh, p. 10. chap. i.

Arrêté of the Parliament of Paris concerning the existence of the disease called the Great Pox.

“ Whereas at this day, 6th March, 1497, it appears there are many persons sick of a certain contagious disorder, called the *great pox*, which

within two years has greatly spread over this kingdom, as well in Paris as elsewhere ; and as it is now to be feared that it may increase this spring, we have decided on the necessity of taking measures to oppose it.

“ That every person sick of the disease called the great pox, whether men or women, who were not actually residing in Paris when the said disease took them, shall twenty-four hours after publication (*cry fait*) be sent or go out of the city of Paris to the country and place of their birth, or else to the place of their residence when they were taken with the disease, or elsewhere at their choice, under penalty of death (*sur peine de la hart*).

“ That all the sick belonging to this city, or who were residents or lodging in this city when they were taken with the said disorder, and who are able to shut themselves up, shall withdraw within the said twenty-four hours, and go no longer, night or day, through the city under the said penalty of death. And these persons, if poor, may apply to the curate, — and without their quitting their dwelling they shall be provided with proper food.

“ All other poor sick, who have taken the disease during their residence or service in this city, who have no means to shut themselves up — on the aforesaid pain of death are to withdraw to St. Germain-des-prez, to go and reside in such houses and places as shall be given or opened to them by persons appointed for this purpose.”

*Proclamation of King James IV. in the Records
of the Town-Council of Edinburgh.*

22 Sept. 1497.

“ It is our Souverane Lordis will and the Command of the Lordis of his Counsall, sent to the Provost and Bailies within this Burgh, that this Proclamation follow and be put to execution, for the eschewing of the greit apperand danger of the infectioun of his Lieges fra a contagious sicknes, callit the *Grand Gore*, and the greit ather Skayth, that may occure to his Lieges and Inhabitons within this Burg.

“ That is to say, we charge straitlie and command be the Authoritie obeve writtin, that all manner of Personis being within the freedome of this Burgh, quilk are infectit or has been infectit and uncurit of this said contagious plage callit the *Grand Gore*, devoyd, red and pass furth of this Toun and compair upoun the sandis af *Leith*, at ten houris before none; and thair sall thai have and fynd Botis reddie in the have or dainit tho thame by the Officaris of this Burgh, reddelie furneist with victualls, to have thame to the *Inch* (An Island in the Frith of Forth over-against *Leith*), and thair to remane quhill God provyde for thair Health: And that all uther personis, the quilk taks upoun thama to hale the said contagious infirmitie and taks the cure thairof, that thay devoyd and pass with thame sua that nane of their personis quhilck

taks the cure upoun thame, use the samyn cure within this Burgh in presence or in peirt any manner of way; and quha so fundin infectit and not passand to the *Inch*, as said is, be *Monnday* at the Sone ganging to; and in lykwayis the said personis, that thay have the said Cure of sanitie upoun thame, give thay will use the samyn, thay and ilk of thame sall be brynt on the cheike with the marking Irne, that they may be kennit in tyme to cum and thairafter give ony of thame remains, thay sall be banist but favour."

The period of Columbus's first return was doubtless confounded with the first appearance of this disease by many authors. But I will endeavour in a more incontestible manner to determine the time of its appearance in Europe from historical monuments, and thus completely destroy what *Oviedo* and *Isla* have advanced, and after them *Astruc*, *Van Swieten*, and *Girtanner*.

This period, as cotemporary authors unanimously agree, as well as their immediate successors, coincides with the march of Charles the Eighth's army through Italy to Naples, and both to the year 1494, &c. It is then essential for greater precision to determine the months, and if possible the very days the French army marched.

The historians of those days alone can fix us on this point. They say that Charles the Eighth was preparing for this expedition in 1493; that he got ready a fleet at Genoa; that he set out

with his army from Vienne, in Provence, the 23d of August, 1494; that his fleet departed a little later; that he fell ill at Asti, which delayed him a month; after this, passing through Lombardy and Tuscany he arrived at Rome on the last day of December; that he made his entrance in Naples the 21st Feb. 1495; that he caused himself to be crowned there the 20th of May following; and, finally, he returned shortly after to France, passing through Italy again with the greater part of his army, leaving the Count de Montpensier behind him with the remainder.

Now *Gonsalvo de Cordova*, Ferdinand's general, arrived in Sicily with the Spanish army the 24th May 1495, and shortly after went over to Calabria. The first battle between the Spaniards and the French under d'Aubigny, was given at *Semiosara* in the month of July, and notwithstanding the French had gained the victory, Ferdinand, King of Naples, entered his capital the 7th of the same month, without being under the necessity to besiege it, any more than Charles the Eighth had done, when he arrived before the city five months before.

From these historical facts, whose truth and precision are incontestible, would it not be absurd to adopt the random assertions of *Van Hutten*, *D'Astruc*, *Van Swieten*, and many more modern authors, who copied them and join in their opinion, that the venereal disease, which appears to have been pretty generally spread

through Paris, in Germany, Hungary, and Edinburgh, during the summer of 1494, was communicated to the French soldiers before Naples, and at the siege of that city?

For 1°, the French army did not lay siege to Naples: 2°. The greater part of this army had left that city before the Spaniards, commanded by Gonsalvo, arrived in Calabria, where they landed only in the end of May.

The French soldiers, who composed the army returning to France with Charles the Eighth, could neither give nor spread a disease the Spaniards were affected with, as it was impossible they could have received it from them at Naples. However, I cannot deny that such an army might not have contributed effectually in spreading a contagion, of whatever nature, then prevalent in one or more places of Italy.

Now the very precise testimony, already mentioned, of PINCTOR, of J. B. FULGOSE, of P. MARTYR, and many others, ought it not to render still more unsupportable the opinion, that the venereal disease, in Italy from 1483, 1485, and 1488, and afterwards spread every where in 1492, 1493, and 1494, originated with the Spaniards who had accompanied Columbus in his first voyage and only came back in March 1493, and that it was communicated by Cordova's army in May or June 1495 to the French, and by these to the Italians or other European nations?

Another consideration, which serves as a complement to every proof hitherto adduced, that

this disease did not originate in America, is this; that not only Columbus says nothing, in the account of his two first voyages, of his companions being infected with the venereal disease; but also no one author, historian, or physician, who wrote during the twenty-five or thirty years this disease ravaged Europe, says positively, that it came from Hispaniola, that it was known there, and still less, that it was epidemic when *Columbus* landed there. For all that *Oviedo* and *Lopez de Gomara* say of this disease being spread among the islanders of America, relates to subsequent times; and like these two writers who assure its origin to derive from these Indians, no persons have cited credible authority; their whole assertions are simply founded in common report.

Fracastor, one of the greatest physicians of his time, (born in 1583,) says, very judiciously, "that although the two eras of the venereal disease's appearance in Europe, and that of the discovery of America, coincide; and notwithstanding it first made its appearance in Spain, it is no ways probable, it should have spread itself so rapidly, in the same time, from Columbus's visit to this country, to France, Italy, Germany, Hungary, Poland, &c. and yet *Fracastor* knew perfectly all that *Oviedo* had written on this subject. The venereal disease was known by the denomination of the *Spanish disease*, the *French*, the *Naples disease*, until the middle of the sixteenth century: no one ever thought of calling it the *American disease*; which they

would not have failed doing, had they been persuaded that it came from America.

Mardanus, another very learned physician, (born in 1461,) adopts no more than *Fracastor* the opinion of the venereal disease having been imported by Columbus's companions. On the contrary, he thinks it much more probable, that it was produced originally in Spain, in consequence of an impure connection between a leper and a public prostitute.

Now because the Indians pointed out guaiacum to the Spaniards as a remedy for the pox, they were inclined to conclude, that this disorder was known to them before the Europeans' arrival. But this wood was not known in Spain before 1508, that is to say, twenty-five or at least fifteen years after the appearance of the disorder in Europe (it was not known in Germany before 1517). It is consequently very probable, that the discovery of this venereal antidote was made by the Indians a few years only before they taught the Spaniards to make use of it. Should they have been acquainted with the venereal disease as well as the virtues of guaiacum before Columbus's arrival in their island, doubtless they would have communicated this precious discovery to the Spaniards immediately, when they were so full of kindness towards them, much rather than some time after, when they were become their most mortal enemies.

May we not then conclude, from all that I have just said, that it is more probable this dis-

ease, which, according to *Pinctor*, appeared in Europe in 1483, and which, according to the epitaph in 1485 I have just mentioned, as well as *P. Martyr's* most respectable testimony, written in 1488, had already made considerable ravages in Spain and Italy; that this disease, I say, had been rather brought from Europe to America, and communicated to the inhabitants of Hispaniola by one or more of Columbus's crew?

Should the inhabitants of Otaheite now find out a remedy for this disease, as those of Hispaniola have already done, would it be reasonable to conclude, that the Europeans had not communicated it to them; and that it originated with them? It was never asserted to have had its birth in Europe, because in this quarter of the globe its specific remedy (mercury) was discovered.

In consequence of the interesting facts just mentioned, taken from ancient authors, respecting the disorders of the genital parts as well as the syphilis, I was very desirous to learn whether the ancient Hindoos had any knowledge of the syphilitic or venereal disease, which we generally supposed unknown to the ancients. The curious anecdote related by *Palladius* on *Hero's* sickness, who fell ill at Alexandria, made a strong impression on me, and for a long time excited the desire of obtaining some positive information. Being in connection at London with many persons setting out for Indostan, I requested several

of them to procure me the necessary informations, to write me what they could learn in general on medicine, and most particularly on the venereal disease. But the greater number who go to these countries, taking little interest in scientific subjects, forgot making these enquiries. Others informed me of the extreme difficulty, not to say impossibility of getting information from the natives; in short, I could get no satisfactory account. Some years after, however, a French traveller, who had resided in India many years, communicated to me several interesting facts and observations; and among others I learned from him that the venereal disease was long known in India; that the Hindoo physicians were acquainted with the use of mercury in this disorder; that they were not only acquainted with its bad effects on the human body, when administered improperly, or in too great doses; but that they were in possession of private methods unknown in Europe, to force it out of the body, or, what comes to the same thing, to make its bad effects quickly cease. He was convinced personally of their talents from his servant's case, who having been improperly treated with mercury by an European surgeon, was ready to become a victim, when an Hindoo physician snatched him as it were from death in a few days: however he could obtain no information concerning the means by which this cure was effected. He added another motive of his astonishment, at having seen several magnetisers

in Tippoo's camp* with a little iron rod in hand trying their skill on sick soldiers: a practice they have made use of for ages to cure certain disorders, and which, we since learn, was known and practised a long time ago in China. These facts and accounts being too vague to draw from them any consequence, only made me doubly curious and impatient to receive others more precise and authentic.

My curiosity has at last been partly satisfied, by the reception of a precious work printed in Calcutta†, under the direction of persons well informed in every branch of useful science; but most especially in what concerns the state of science in these countries, and that which greatly enhances its value, is, that they have become acquainted with the sacred language (the Sanscrit), and recently opened a communication with the learned men of the country. Among many very useful observations and discoveries we find, in the second volume of this work, that the venereal disease has been known in Indostan from time immemorial, by the name of *the Persian fire*; that the use of mercury is also known there; that some Hindoos, employing cinnabar in this disease, often render it very obstinate; that this inveterate disorder becomes incurable with mercury, and frequently ends in both cases in a

* They doubtless made use of galvanism, without suspecting the existence of the fluid discovered, some years ago in Italy, by Galvani.

† *Asiatic Researches*, in 4to. Calcutta.

dangerous sickness, wherein the whole body becomes ulcerated and the extremities rot away. The Arabs call this latter disease *judham*, and the Hindoos *korah*. This appears to be the same as the *leontiasis* of the Greeks, and what *Paul d'Ægina* calls the *universal ulcer*, a terrible disease, frequently fatal, for which neither the Greeks nor Arabians know any effectual remedy. The same work informs us that the *Bramins* of Thibet were in possession of a certain remedy to cure this disease; that they in general look upon it as proceeding from a degenerated state of venereal virus, or the consequence of an inveterate venereal disease; but however they do not pretend, that it may frequently proceed from other causes.

A modern author, who was long resident in Indostan, lately informs us, that the venereal disease was now generally spread over all India, from this we may conclude, that it may very well have existed there before Columbus's and Vespusius's voyages to the western hemisphere. Should this disorder have been introduced in India only since the discovery of America, this period is still so recent and the evil so great, that in a civilised and enlightened country, where the principal cities keep up a frequent intercourse, the period of the disorder's appearance, and the name of the people who carried it there, would be well known and transmitted to us: now we much doubt of the existence of any such tradition, and yet cannot hide from our-

selves the non-existence of any Sanscrit word for this disease* : the Indians all call it by the name of *Ateshec*, a Persian word derived from *Atesh* fire, and the diminutive *ec*, that is to say, little fire ; whence the denomination *Persian fire*, (Vide Q. CRAUFURD'S *researches concerning the laws, theology, learning, commerce, &c. of antient and modern India*, 2 vols. in 8vo. London, page 154.)

There then the source and origin of the venereal disease is attributed from time immemorial by the Hindoos to the Persians, just as the Europeans have so long attributed it to the Americans, the French to the Neapolitans, the English and Germans to the French, and latterly the inhabitants of Port St. Paul in Canada, to the English. It seems that the various names, Persian fire, Naples disease, French disease, and the English disease of St. Paul's bay in Canada, ought all to be reduced to the same meaning,

* I have however been informed, that in the Hindoo and Bengalee languages or dialects the venereal disease is known by the name *Bâd*. The Hindoo appears to have been the original language of the country. The Bengalee is a corrupted Sanscrit, mixed with Hindoo, Persian, and Arab ; it is worthy of remark that according to *John Lemaire*, the Spaniards in the beginning called the syphilitic disease *la Baus*. It is easy to see the letter *S* was only a Spanish termination. The other Bengalee denominations are, *Ourâ*, pox ; *Médhrovôg*, venereal disease ; *Oupadongch*, venereal bubo. In Sanscrit, the word *Médha*, which is pronounced *Médh*, signifies horse. In the Malay tongue, the venereal is known by the name *Rastong-kôtchy*, (a canton of Malabar or Cochinchina, for *kôtchy* means both these countries.)

and that they belong to one and the same disorder. Were it possible to question the learned Persian historians, concerning this disorder, it is possible they would show it derived from the Jews, and call it the Hebrew's fire. At least the expressive words of the PROPHET, "*Fly the person afflicted with the JUDHAM, as you would fly from a lion,*" clearly indicate that the Judham was a sickness well known to the Jews in those times.

It appears then very likely, that the pox, such as it began spreading itself in Europe towards the close of the fifteenth century, had infected humanity several thousand years before in Persia, Thibet, and Indostan, as possibly it had done for many ages in the islands discovered by Columbus; that it was long known to the Arabs, who had received it from the Persians; and that Hero, of whom I spoke before, had got a portion of this Persian fire at Alexandria, where it had been imported, like other merchandise from Malabar, Hindostan, or Persia, which the Hindoos look upon to be its native country.

The reader may now make choice as to the native country of this disease, whether it be Asia, Africa, America, or even Europe, without injuring the pretention of any one of these parts of the world, to ascribe the priority of this shocking detestable disease, that poisons the very source of pleasure and population, to some other. Be it as it will, it appears no ways probable to me, that it was brought from

America to Europe: and now having said enough on the history of its origin, I shall pursue my observations on no less important parts of the subject.

The original source or primitive cause of the syphilis is then perfectly unknown. SYDENHAM, and many other physicians, suppose the venereal disease to originate in the disease known on the Gold-coast, and other parts of Africa, by the denomination of the *Yaws*, (PIAN or EPIAN.) Other writers pretend that the venereal disease took rise in Africa, from a man, who, after coition with a quadruped, had cohabited with a woman, to whom he thus communicated the disease.

The learned professor SPRENGLE at Hale, has advanced a much more plausible opinion, that the syphilis was owing to a combination of the Elephantiasis, or tuberculous leprosy, with the epidemical or pestilential disorder that ravaged part of Europe, in the fifteenth century.

Should some authors suppose, the venereal sometimes takes rise in the body where it manifests itself, I am persuaded that appearances have deceived them; either from want of knowing that the venereal virus may be absorbed into the mass of the blood, without having any trace on the surface of the body by which it may be known, or from want of reflecting that the virus may remain for a long time latent in the body without giving any evident signs of its existence.

As to the progress and propagation of the syphilitic disease, it appears in general, that the virus on its first importation to any country, no matter what may be the climate, produces the most violent effects on the human body: but these ravages are dreadful, at least for some time, after its importation from a warm to a cold climate. The progress and symptoms of the syphilitic disease, imported from Europe to Canada, in our days, is an incontestible proof of it: perhaps its disastrous effects, on its appearance in Europe, were owing to the same cause. We have still opportunities of observing that the syphilitic diseases of the genitals, caught on the coast of Africa and transplanted into England, are in general more violent, than those communicated to each other by the inhabitants who never quitted their country. Besides this the nearer we approach warm climates, the more gentle is the syphilitic disease and the easier it is to cure.

The passage from *Leo Africanus*, before mentioned, confirms this opinion: and Bruce too acquaints us in his *Travels in Abyssinia*, that the venereal disease, although very common at Sennaar, is so mild that it is easily cured by sudorifics and baths. However, according to the Bramins of Thibet and Indostan, the pox either ill-treated or inveterate, in warm climates, degenerates frequently into the Khorah or Judham (Elephantiasis) and kills the patient.

It appears in general, the more this disease is

spread about, and the longer it has remained in any country, the more it loses force, whether from the improved method of treatment, or the celerity with which remedies are applied: if not to a change in the nature of the virus, in consequence of its infinite dissemination, or from some other unknown cause.

Although the syphilitic virus is propagated in Europe, at present, most commonly by coition, we must not imagine, and I have proved it before, by very authentic historical facts, that this was always the case. On the contrary, the pox after its appearance in Europe was spread, during the first ten, twenty, and perhaps fifty years, according to cotemporary authors, physicians, and others, by the air alone, or more certainly by the clothes, the bed, the furniture, the simple momentary contacts of the sick infected person. By these means, one single infected person might propagate the disease throughout a whole family, without their knowing how it came; in this manner, the husband might give it to his wife, and a father to his children, unknown to himself. The general testimony of Schelling, Torella, Montesaurus, Joan. Benedictus, &c. &c., all positive ocular witnesses, leave not a doubt on this subject.

More modern physicians, observing the propagation of the syphilis, almost always occasioned by coition, have begun to suppose this was always the case, and now our cotemporaries laugh at what they imagine the inattention and

credulity of ancient authors. Scarcely could one physician be found in our time, and particularly of late, who would give the least credit to the above-mentioned authors' assertions, concerning the propagation of this disease without coition. This fact would have been for ever contested, and the error perhaps never rectified, were it not for the new disorder that has broke out in Canada; of which I have drawn a faithful picture in chap. xv. By attentively reading the detailed account, printed and presented to the English government ten years ago, (communicated to me by my friend Dr. Nooth) on this new disorder, by Dr. Bowman, an eminent physician, it will be easily perceived his observations must silence the most obstinate sceptic. This practitioner acquaints us, that the disorder is most commonly propagated by the utensils, clothes, &c. &c. exactly in the same manner as in the fifteenth century, when it appeared in Europe, and that it often produces there the same dreadful symptoms, mentioned in the above authors. These precise and well-authenticated facts, corroborate the truth of what these early writers transmit us concerning the symptoms and dissemination of this disorder. The observations lately made in Scotland on the contagious nature of the *Sibbens*, and those on the *Yaws* in chap. xvi. and xvii. support and confirm the conclusion I have just made.

Reflecting on the rapid and dangerous propagation of the pox, on its first appearance in Europe, I am no longer surprised, that so many

governments at that time hastened to banish the sick out of their capitals, to unfrequented places, separated from intercourse with the healthy, as we have before mentioned. This, at the same time, amply justifies the name at first given to this disease; by calling it *Scorra pestilentialis*, *Gore*, *grande Gore*, *Verole*, *ou grande Verole*, *Pox* or *Great Pox**, all names very well adapted to the nature or characteristic symptoms of the disorder on its first appearance, though scarcely of any interest now. It could not be called then the *venereal disease*, a denomination invented long after in Europe, because at that time its propagation by coition was looked upon as null, or at most very accidental.

As to what relates to the intimate nature of the virus, it is and will perhaps ever remain unknown to us; we only judge of its action by its effects. The syphilitic virus, applied now to the surface of the body, cuts by irritating and eroding the part every where; but it does not so easily affect the parts protected by the epidermis, that is the dry parts of the surface, as the moist or red surface or the mucous membrane, covered with the epithelion; it affects still more easily wounded or ulcerated parts. It is really surprising and difficult to imagine how so small a portion of this poison can produce so great and general effects. On the other hand, we are equally surprised, that so small a quantity of mercury, par-

* It was called *Pox* or *Great Pox*, because of its great pimples and hideous excrescences.

ticularly the oxymuriate of this metal, suffices to diminish and stop the effects of this virus. It appears probable to me, that the syphilitic virus, applied to a sound subject, multiplies itself by a kind of fermentation and assimilation, and, after thus causing ulcers in the genital parts, or in the surface of the body, it is partly absorbed by the absorbent vessels, and carried into the nearest lymphatic glands, or even directly to the system, to be finally deposited in the throat, the skin, or the bones. I am far from giving this theory for certain, but it appears as yet the most probable. Many modern writers, on the contrary, think the virus produces its effects on the animal economy, by exciting a morbid action in the part to which it was first applied; that it is not absorbed as is generally thought, but that a morbid action, similar to that which the virus has excited in the genitals, is re-produced in another part of the body *by simple sympathy*, without a direct action of the virus: that mercury, as well as other anti-syphilitic remedies, cure this disease by exciting a different action or new disorder in the body, in consequence of which the action of the syphilitic virus is suspended.

This suspension, having existed long enough, the virus, according to them, is finally driven out of the body in consequence of the change fluids naturally undergo.

This ingenious theory, which is generally ascribed to J. Hunter, belongs to Dr. Barthez,

who published it in his treatise named: *Neuveaux élémens de la science de l'Homme*, Montpellier 1778, chap. viii. p. 166. "The sympathy existing between the genital organs and the throat, may in a manner depend on their secretion of a slimy humour. This sympathetic cause appears to decide particularly the succession so often remarked in venereal diseases, in the lesion of different organs; the more so, as the venereal virus appears to me (contrary to Boerhaave and Astruc's opinion), to have its greatest affinity with mucous humours." And Morgagni had already remarked, that the convulsions, which take the wounds of the genital parts, are often preceded by a sense of pain, or stiffness in the neck. Here are the objections that render this theory little probable in my opinion: were this theory founded, one would naturally think, the sympathetic action ought to take place naturally, rather during the most vigorous action of the virus, and yet that scarcely ever happens; the ulcers in the throat, the spots, ulcers or syphilitic tetters on the skin, the exostosis and the pains in the bones, seldom appear at this period, but usually four, six, eight, and sometimes twelve months after the cure of the disorder in the genitals, or their total disappearance. Sometimes these syphilitic affections take place without the smallest preliminary affection in the genitals. If this theory were founded, we might ask why we never or hardly ever see primitive syphilitic ulcers in the throat, or on nurses' nipples, produce

sympathetically ulcers or syphilitic affections in the genitals. It would seem such reciprocal actions should sometimes take place. Is sympathy then never reciprocal in this case? We may still ask, why do the sympathetic actions take place only in the palate and the genitals, the roots of the hair, the skin and bones, while the other organs and viscera of the body are never affected? What is the sympathy between the hair or bones and the privy genital parts? And this sympathy, is it confirmed by any other disease than the venereal? How comes it, that after having destroyed the virus in its source, after having cured the hemorrhages and syphilitic ulcers with topical remedies, we often see ulcers and other syphilitic symptoms, make their appearance in other parts of the body? And why is it necessary to make use of mercury internally to prevent these accidents, or even to administer a complete mercurial treatment?

The actions of the venereal virus on the human body is very different from that of every other poison, contagion or cachexy. Just like the small-pox, the syphilis on its first appearance in Europe was communicated, if not by the air, at all events by the slightest contact, immediately producing, like the *Yaws* or *Sibbens*, hideous excrescences and eruptions all over the body; but it chiefly broke out in the face, which it disfigured.

During the first twenty years of the sixteenth century, the syphilis had still a great resemblance

to the Elephantiasis, or tuberculous leprosy; it was still very dangerous and often mortal. Vigo, too, remarked in 1513, a strong resemblance between the syphilis and the *Safati* (*mal morto*), or black leprosy. HÆKNER, a very famous German physician in the beginning of the sixteenth century, says in his book (*Die grosse Wundarzney*, l. iii.) *high or transcendant surgery*, that the syphilitic disease had changed the character of almost every other disorder in his time, and he conjectures it to proceed from a combination of the common leprosy with a malignant ulcer.

We see that the elephantiasis, or tuberculous leprosy, was on the decline, or at least become very rare towards the end of the fifteenth century; and FRACASTORI says, in his treatise *De Morbis Contagiosis*, that, on the first appearance of the syphilitic, this latter was confounded with the former. VALLERIOLA says, that the syphilis, either mistaken, or ill treated, ended by transforming itself into the tuberculous leprosy or elephantiasis; an opinion universally received among the Hindoo physicians. (*V. Asiatic Researches*.)

This same virus, propagated since, particularly at present, by an almost general inoculation, if I may use the expression, (for I look upon its present mode of propagation as a kind of inoculation) has become just like the small-pox, much less deadly in its effects, and its symptoms much less violent; the hideous excrescences have disappeared; the general and copious eruption of pustules is now become partial and little nume-

rous. On the other hand, the syphilitic virus is essentially different from that of the small-pox, because the pathognomonic and essential character of the small-pox is, to powerfully excite the action of the heart and the arterial system, and produce all the symptoms of a sthenic, or, as it is commonly called, inflammatory fever; while one of the most certain symptoms of the great-pox, or syphilis, is, from its first appearance to this day, that of producing generally quite a different state in the bodily system, torpor, weakness, and apathy.

Natal. Montesaurus, in 1497, talking of himself says, “*Hi dolores magis affligunt nocte adveniente, et sentiuntur perinde ac si ossa frangantur et extendantur, cum quâdam difficultate movendi membra voluntariò.*” And *Jos. Grünbeck*, 1503, who had suffered this disease himself, says: “*Aliqui, totis diebus et noctibus omni somno abacto, caput dolent. Alii ineffabiles punctiones gravedinemque in scapulis sentiunt; cæteri in cubitis, genibus, vel crurum teretibus: postremi in istis omnibus simul. Hi nec stare, nec ingredi, nec quidcunque operis humani perficere possunt.*” I forbear multiplying those citations. There seldom ever exists a sensible re-action of the arterial system; or should it produce this effect, it only occasions a slow fever, attended with weakness and debility: in every constitution it appears with scarce an exception, to undermine and destroy the vital principle, and pursuing its dreadful ravages, produces frightful érosions, the fall of the

hair, the nails, and even that of whole limbs, without causing the least re-action of this principle, and finally it totally overpowers it and brings on death. This is the reason, why hardly any one attacked with this disease, is ever cured by the simple efforts of nature, which appear perfectly passive, and never to make any effort in opposition to the ravages of this virus; and should that sometimes happen, the examples of it are so rare and so limited to warm countries, that they are not worth attending to.

Another essential difference between the great and small pox is, that the latter seldom attacks man more than once in his life, while the syphilis attacks him at every age and at all times, whenever he exposes himself to it.

The same difference exists between the syphilitic disease and the *yaws* or *pian* (*Thymiosis*, meæ Nosol.) The latter never attacks man, according to credible travellers, but once in his life; and the negro women well know this property of the yaws, for they inoculate their children with it; and the yaws, thus inoculated, becomes not only a more benignant sickness, but for ever protects the subject from this hideous disorder; this well-established fact makes us look upon the yaws as a disease essentially different from the venereal.

Korneman, the traveller, says, that there are two different venereal diseases in Fezzan. The most dreadful is that which comes from Soudan; and, for this reason, called the Soudan

disease by the people of the country ; the other is the venereal disease, as it exists in Europe, which they call *Franzi*, or the *Francs disease*, because it was imported from Tripoli and other ports of the Mediterranean. He adds, that no one ever had these two disorders at the same time, nor one after the other ; and the general opinion in the country is, either of them is a certain preservative against the other.

Certain physicians have found a great resemblance between the syphilis and the scrophula ; but the syphilitic virus is essentially different in its effects, from the disease called scrophulous. This latter chiefly attacks children, and very seldom subjects arrived to pubescence. It chiefly shows itself by the swelling of the maxillary and sublingual glands, those of the neck, the lower belly, and the lungs ; it produces very obstinate obstructions, suffocations, and tumours, that never suppurate completely (*ægrè suppurantes*). The syphilitic virus, on the contrary, never affects any other glands but those of the groin, the arm-pits, or the arm, because it passes directly through them into the blood. The tumours it causes suppurate easily and quickly : the fulness, or coagulation, and the stoppages, this virus sometimes occasions in the prepuce or lymphatic vessels of the yard, are generally dissipated with facility ; when it attacks the amygdal, as often happens, from secondary infection, (which is very remarkable,) it never begins to act outwardly on these glands ;

it never produces indolent tumours, induration, nor suppuration; but it destroys them gradually, according to my observations, by eroding them from the outside inward; beginning by ulcers on their exterior surface, and thus forward in a manner from layer to layer, from the surface to the centre.

We must remark, that the syphilitic virus, when it affects the body, at present acts principally on the mucous membrane, or on the mucous glands of the genitals and the neck, the skin, the bulbous roots of the hair, and the bones. From this proceeds the ulcers in the skin, the neck, the nose, the fall of the hair, as well pains, exostoses, and erosion of the bones. The various mercurial preparations, which in these cases are generally the most effectual for curing the syphilis, are always found extremely hurtful, and often hasten death in scrophulous diseases.

With respect to the effects and the rapidity with which they arrive, the venereal disease, at least as yet, does not follow any general rule. It appears that for some years after its first appearance in Europe, it was communicated not only quicker and easier, but that it was much quicker too in its destructive effects. In our days, on being applied to the privy parts, it is generally three, five, ten, fifteen days, or even longer, before it produces ulcers or runnings; in some still rarer cases, its effects are seen in twelve or twenty-four hours after impure contact.

We are equally ignorant during what time

the syphilitic virus, either after its entrance into the mass of the blood, or when it affects the human system in a secondary manner, may remain hidden or inactive in the body. Sometimes it remains longer, sometimes shorter, before it produces any sensible effects. There is no practitioner who has not seen cases where the virus remained in the body several weeks, or even months, without causing any apparent symptom. I had particularly an opportunity of remarking one; in which after lying dormant for six months, it at length manifested itself with unequivocal symptoms. It even appears to me in certain cases to require the aid of some other cause to excite or manifest its energy.

Were we possessed of a remedy capable of producing this effect, it would doubtless be an important acquisition to guide the practitioner, and tranquillize the patient. It has been asserted, that the flesh of a certain lizard, called *Iguana*, as well as sea-turtles' eggs, possessed this remarkable and much wished-for property. It would be well to ascertain by positive experiments, whether the eating of either of these substances produce the effect ascribed to them, of vivifying the syphilitic virus, either latent or hidden, in the human body; and also whether this *Iguana's* flesh be or not a specific remedy for the venereal disease, as they pretend in Spain and South America; it is the physician's business to verify these assertions in warm climates. However, I have made use, very suc-

cessfully, in many equivocal cases of iron and ferruginous preparations. I have seen many persons, healthy in appearance, but uneasy about their state, who, after a few days' use of those remedies, manifested evident symptoms of the syphilis ; but for want of observations sufficiently numerous, I dare not yet draw any general conclusion. By thus communicating the result of my experiments to the public, the better informed physicians may soon determine what credit it merits, and whether this effect of iron be constant and general.

Sometimes in foul coition the virus is absorbed by the lymphatic vessels, and directly causes buboes ; at other times, it seems to pass immediately after impure coition into the body, and then produces syphilitic affections in the throat, the skin, and even in the bones, without producing any sensible effect in the parts to which it was at first applied, and that without leaving the smallest trace on the surface of the body. This is what often gives rise to grave errors, into which the physicians often fall, as well as the patient, by supposing the present syphilitic symptoms are owing to some old venereal disease badly cured ; though these symptoms may proceed really from a much more recent infection, because they do not think, or cannot even imagine how it is possible to get the pox, without first having had chancres or a hemorrhage in the genital parts. For the same reason, they are also some-

times disposed to ascribe the cause of their disorder to some perfectly innocent person.

As to the order in which the syphilitic virus attacks the various parts of the body, it should appear, according to the assertion and theory of *J. Hunter*, that it follows one general and uniform progression. The effect of the virus on the genital parts, according to him, is to excite a similar sympathetic morbid action in the throat. Its action in the throat, by the same analogy, excites a similar action in the skin, and finally produces the same morbid action in the bones. The observations of enlightened and unprejudiced practitioners shew us, that the venereal virus does not follow any regular order in the beginning; sometimes it immediately after produces affections in the genital parts, and eruptions on the skin without a sore throat; at other times it attacks the bones preferably to every other part. The only consolatory thing for the philanthropic observer is this, that the affection in the bones becomes less frequent and violent from day to day in Europe, where the arts are more carefully cultivated, and practitioners better informed.

A remarkable fact, observed sometimes at present, and which was already known to *Cataneus* in the beginning of the sixteenth century*, is, that although the generality of man-

* *Jac. CATANEI Tractatus de Morbo Gallico*, 1504. *Morbus contagiosus est, et ut plurimum per coitum cum infectâ*

kind are easily affected in one manner or other by this dreadful poison, there are nevertheless some privileged beings who seem in no manner susceptible of this contagion, and who expose themselves to every danger without ever receiving the slightest injury; just as we see certain persons incapable of taking the small-pox, though far from avoiding places poisoned with it, they expose themselves to every situation in which others would not fail catching it. These cases, in fact, are very rare; however, it is evident, that certain persons are more easily infected than others, although apparently of the same constitution; and some authors think that those who have once been infected with the syphilitic virus, are more disposed to receive the contagion again, than those who never had the disease. The climate, season, age, state of health, peculiar disposition, are perhaps, as in other disorders, the predisposing causes. The same difference is observed in the progress of the disease after communication of the virus. In some, its progress is slow, and it hardly appears advancing for some days, weeks, or even months; whilst in others it proceeds

vel cum infecto contrahitur. Virile membrum vel vulva primò inficitur, ex contactu ulceris in iisdem membris existentis. . . . Causa fortior vel debilior erit secundùm variam dispositionem individuorum. *Vidi tamen complures concubitus immundorum non recusantes, et in sordes venereas sese præcipitantes, qui tamen nullam inde infectionem hauserunt.*

with the greatest rapidity, and makes dreadful ravages.

It is a general observation, that persons of either sex, who are taken with any feverish disease whatever, in public hospitals, while labouring under the venereal, frequently die; and that patients of either sex, who have ulcers or runnings in the privy parts, when they catch a smart fever, frequently perish, in consequence of a gangrene in these parts.

I think I have observed, that red-haired persons, with very white skin, suffer most from the syphilitic disease, and that the ulcers in the throat, and other symptoms of this disorder, are much more obstinate and frequently fatal in them, than in persons of a brown complexion.

From what I have just said here, and in the foregoing chapter, it appears clear and evident,

1°. That the privy parts of either sex have, in all times, and in every known nation, been subject to various diseases very like those produced by the venereal virus at present in Europe. The blennorrhagia of the urethra, or the gonorrhœa (improperly so called) of the Jews, the various ulcers in the genitals, the gangrene of the yard, the swellings in the inguinal glands, the various excrescences and rhagades, all the symptoms described by ancient Greek, Latin, and Arabian authors, and more recently by many writers down to the close of the fifteenth century, are certain and non-equivocal proofs

of it. But we do not find, in any of these ancient authors, the smallest trace of the accumulated symptoms, produced by the syphilitic virus in the human system, which properly constitute the venereal disease.

2°. That near the end of the fifteenth century, that is to say, from 1483 to 1493, a new and unknown disease made its appearance in the south of Europe; a disease so contagious and so dreadful in its havoc, that it was generally looked upon as pestilential, so that the first physicians who wrote about it, called it a pestilential sickness (*scorra pestilentialis, morbus pestiferus, pestis inguinaria,*) not only because it was communicated on its first appearance with incredible rapidity, by the atmosphere, the clothes, furniture, by lying in the same bed, or any contact between a sound and an infected person; but also because it was fatal to a great number of persons.

It appears evident, according to cotemporary authors, that this disease was then generally communicated without coition, and that many died of it without having had the slightest affection in the genital parts, exactly as BOWMAN observed in the new disorder in Canada, (vide chap. xv.) The ulcers and hemorrhages of the genitals were most frequent in the first twenty years after the appearance of this disease; and HÆCHENER informs us, that the gonorrhœa more frequently presented itself like a symptom of the syphilitic disease after 1525, and that it was

then named *gonorrhœa francigena*. It is very possible then, that many illustrious persons were infected at the period we mentioned, without any carnal intercourse.

3°. This disease, which more generally manifested itself in the French army on its return from Naples, was called the Naples disorder, (*malum Neapolitanum*), and afterwards spread by the French in Italy, and in the rest of Europe, under the name *mala de Frantzozos*, or French disease, (*morbis gallicus*). Shortly after, seeing that this disease was then always accompanied, like the small-pox, with a pustular eruption in the whole surface of the body, and chiefly in the face, they named it the *gore* or *pox*; and to distinguish it from the small-pox, that of the *great gore*, *great pox*. After this period, remarking that it was chiefly propagated by coition, it was called the venereal disease, or syphilitic disorder, a name that I have adopted in preference to every other, for reasons already mentioned.

The Spaniards, in consequence of another very common symptom in this disease, gave it the name *Baus* or *las Bubas*; from whence, most likely, the Italians took the name of *Pestis Inguinaria*, inscribed on the Roman epitaph heretofore cited. It is to be remarked, that the plague which comes from Egypt is generally, or at least frequently connected with swellings in the lymphatic or other glands, which are inflammatory and frequently gangrenous.

4°. This disorder, though apparently unknown to the European physicians in the fifteenth century, is not a new disease: for the Hindoos look upon it as having existed from time immemorial in Indostan and Upper Tartary, under the denomination of Bâd, or Persian Fire. They are well acquainted with the manner of treating it, as well as the specific property of mercury; they are convinced from numberless and well-attested observations, that this disease ill-treated or inveterate often degenerates into what is called *Khorah* or *Judham* (*Elephantiasis* or *Leontiasis* of the Greeks,) or else the tuberculous leprosy, one of the oldest diseases of the world, especially in the warm climates of Asia and Africa. This last disorder was well known, as we shall show in vol. ii. chap. 18th, by the Jews, who gave it the same name as the Arabs; for the prophet talks of it as of something well known: *Fly*, says he, *the person afflicted with the Judham, as you would fly from a lion*. Now take notice, that the Hindoos pretend that the general cause of the *Khorah* or *Judham*, is the *Persian Fire*, which they regard identical with the syphilitic disease, although they do not deny that the *Judham* sometimes proceeds from other causes. They are well acquainted with the elephantiasis (*Judham*) since they alone know how to cure it radically; the Jews, Arabs, Greeks, and all modern physicians having looked upon it as incurable till now. Of this we can easily convince ourselves by perusing the several authors who

mention it, and particularly what *Paul* of *Ægine* and *Hillary* have written in the last century on this subject.

5°. The constant and characteristic symptoms of the pox or syphilitic disease, on its appearance in Europe at the close of the fifteenth century, were, 1°. A general eruption of nonsuppurating pustules all over the body. 2°. Hideous excrescences all over the skin, but particularly in the face, that often changed into painful ulcers, with a running of ichorous and fœtid matter, frequently ending in blindness, the loss of the nose, hands, or feet. 3°. By tumours and violent pains in the bones, giving no rest to the patient by day, and still less during the night. 4°. A general apathy and weakness.

6°. Historians tell us, that Columbus on his return from the *second* voyage to the Caribbee Islands, had found among the natives there, a disorder exactly similar, in its symptoms, to that we have just spoken of.

7°. Towards the same time, and perhaps even before, was found among the inhabitants of the coast frequented by the Europeans since 1452, that is, at least forty years before Columbus returned from the Caribbee Islands, an epidemical disease, whose characteristic symptoms were tuberculous and hideous excrescences in the face, pustules, and gnawing ulcers over the body, with violent pains in the bones, chiefly at night. The Africans called this disease as they still do, because of the resemblance of these excrescences

to a raspberry, *Yaws*, from whence derives the barbarous name of *Frambæsia*, that SAUVAGES has given to this disorder, and for which I have substituted the more proper Greek name *Thymiosis*, in my practical nosology. This disease is contagious, is communicated by contact, and is now radically cured by the same remedies as the syphilis: but it never attacks a man more than once in his life. (v. tom. ii. chap. xvii.)

8°. A contagious disease communicated sometimes by the clothes, a kiss, or simple contact; sometimes appearing in the neck attended with gnawing ulcers in the throat, face, and other parts of the body, nocturnal pains in the bones, and singular excrescences in the face; exists in our days, in some parts of Scotland, called *Siwins* or *Sibbins* by the inhabitants: this is a Celtic word, and remarkable as it signifies raspberry. (v. tom. ii. chap. xvi.)

9°. A new and very contagious disease, extremely violent, and in many respects like the Siwins, but whose nature and effects, progress and symptoms perfectly similar to those of the syphilis on its first appearance in Europe, has made its appearance latterly in Canada, and is called there by the people of St. Paul's, the *English disease*. (v. tom. ii. chap. xv.)

10°. From the above-mentioned facts, it appears evident, that diseases very much resembling the syphilis in all their characteristic symptoms, on its first appearance in Europe, were known, and perhaps long before, in the

warm climates of Asia, Africa, and America; and that the words, *Scorra pestilentialis*, *Pestis inguinalia*, *Baus* or *Bubas*, *mal Napolitain*, *mal Français*, *gore* or *pox*, *venereal disease*, or *syphilis of Europe*, the *Persian fire of the Hindoos*, the disorder in Canada, and the Siwins of Scotland, all mean the same disorder or different modifications of it, all of which generally yield perfectly to the same mercurial treatment.

11°. Now notwithstanding the deepest and most impartial enquiry, it appears more than ever doubtful, whence this dreadful disease, we now call the venereal or syphilitic disease, took its rise: was it Persia that first produced the disease known under the denomination of *Persian fire* among the Hindoos, who seem to indicate it; was it imported into Europe from India, or Africa, or any other foreign country; or may it be considered to have taken rise in Europe, from a complicated concurrence of circumstances or unknown causes: or finally, has the same prolific cause, exerting itself in the same manner, separately in every quarter of the globe, produced in each, this disorder, quite independently of any communication with another.

12°. This disease, which on its first appearance in Europe was communicated, if not by the atmosphere, at least according to many contemporary authors, by immediate contact with any part of the body, by kissing, furniture, clothes, &c. has (just as the new diseases in

Canada and the Siwins of Scotland are at this day) now little by little lost much of its primitive strength, and is gradually become so much milder, as to be hardly ever caught, at present, in any other manner than by immediate contact, particularly that of some moist or red part of the skin, with another diseased part; if not by coition: and even then it requires commonly several days, and frequently weeks, before the virus begins to act in a sensible manner on the genitals. Its principal and characteristic symptoms were, numerous pustules over the body, hideous foetid excrescences, and ulcers that destroy the eyes, the nose, the feet and hands, symptoms which have almost entirely ceased in Europe at present: the painful affections of the bones are even become, within the last fifteen or twenty years, much less frequent; and the treatment of this frightful disease, which blasted in its source and threatened to extinguish the human race, is now become as simple as expeditious to the well-informed practitioner, particularly should the patient desire his assistance in time.

13°. That though this disorder may have been inveterate when ill-treated, as well as when it is accompanied with the most dangerous and obstinate complications, our modern discoveries promise to afford to practitioners simple, and till now unknown, resources; which doubtless will tend to facilitate the treatment, to render it in every respect more certain, and less dangerous than it was by former methods; and thus

change this dreadful disease, which threatened death to the existence and propagation of the human species, into an affection generally tolerable, and even to extirpate its deepest ramifications.

By uniting these several proofs as I have done, they have given rise to many conjectures, the principal of which I am going to expose, because they may perhaps throw some light on the obscure origin of this disease. The knowledge of its existence in Indostan from time immemorial; its existence recognized by the first traveller in Africa as an epidemic disease; the various diseases of the organs of generation, described by the Greeks, the Romans, and the Arabs; the corrosive ulcer and gangrene of unhappy Heron's yard in the 5th century, at Alexandria; the gonorrhœas or discharges, as well as the corrosive ulcers of the privy parts, proceeding *propter decubitum cum muliere fœdâ*; all the afflictions I mentioned in the preceding chapter, have suggested to me the idea that the syphilis has already perhaps been more than once round the globe. This globe, the human race, and its diseases, are very old; but at the same time, history or at least our historical traditions are very young.

On its first appearance in any climate, the syphilitic disease is very violent in its effects; but it is still more so when imported from a warm to a cold country; the disease in Canada is a proof of this, and the pox which appeared in Europe in the fifteenth century, may possibly confirm the

remark. After some time this disorder appears to have become milder, its progress slower, its symptoms less violent, and in the present day many of them are quite disappearing, so that perhaps finally, at a more advanced period of its decline, it will only affect the organs of generation, which in its beginning, its return, or in its attack on a new people, perhaps by uniting itself with some other poison, may make the virus act with more effect and violence. From what I have said, it is very possible that many gonorrhœas, ulcers, &c. of the Greeks and Romans, &c. were really the tardy effects of an old syphilitic virus, and, if I may say so, degenerate in energy, that the Romans had received from the Greeks, the Greeks from the Egyptians, the Egyptians from the interior of Africa, or by the trade to the coast of Malabar, if not by war or direct commerce with Persia; the country which appears to have furnished this disease to Indostan, &c. The greater number of the disorders in the genitals known to the ancients, would thus be nothing else than modifications or effects of the syphilis, just as in our days; though, however, it be very certain, that these same diseases may and do sometimes proceed from other causes and acrimonies of a very different nature from the syphilitic virus, as I think I have shown in the foregoing chapter. The virus, perhaps, by multiplying and extending itself, may have divided and extenuated itself in such a manner, that at length it is quite extinguished, and has disappeared, if not from the

whole surface, at least from one quarter of the globe, to make its appearance again with double force, after ages and thousands of ages to come, in one or more parts of the earth. The tuberculous leprosy, or elephantiasis, perhaps authorise this conclusion; very widely spread in Europe during the fourteenth and fifteenth centuries, it has so disappeared, that we hardly see here and there in the great cities of Europe, at present a solitary case of this disorder. We may suppose as much, with respect to the *Mentagra*, or dartre on the chin, of which PLINY (Hist. Nat. lib. 26.) speaks as of a most contagious disease, caught by a simple kiss or the slightest contact; which came originally from Egypt, and after raging for some time in Rome, has since totally disappeared. It is at least probable, that this virus or contagious poison has lost part of its energy or virulence, from the time it ceased being spread by the air, because immediate contact is now necessary to communicate it; and that it is still grown weaker, when simple contact no longer suffices and something more is necessary, such as a more intimate and long-continued application; when even it no longer acts in general on the skin, but needs a more delicate, irritable surface, and at the same time requires some favourable circumstance, and a longer period to produce its effects. It is at this period, that it can no longer be communicated but by the red or moist surface, and that immediate contact even protracted is necessary to produce

the blennorrhagias, or ulcers in the privy parts, before it attacks the general system. It is likely that there comes a time when it ceases having any effect on the body, and is quite limited to the genital parts. We should then find ourselves just in the same state, as historians represent, as the Greeks and Romans, as well as the rest of Europe, until the fifteenth century. The virus would then be incapable of any but local effects.

Perhaps the tetter, a disease so common in France, are nothing else than the tardy effects of a worn-out degenerate virus. It is possible, that among the people who first received the principles of the syphilitic disease, and disseminated it, this virus ought to wear out and degenerate sooner than elsewhere; and though it be still in this contagious state, and easily given by an affected person to a sound one, especially by excoriations of the skin, the nose, eyes, &c. it confines itself to these parts, and its effects are confined to the skin.

There is no doubt but more enlightened principles and more effectual means, joined to timely relief, will hasten this desirable period.

The authors who wrote on its first appearance in Europe, all tell us this disease was then communicated by the air, the clothes, vessels, and the slightest contact. Doctor *Bowman* tells us, that the inhabitants of St. Paul's in Canada, where the disease was brought recently, got it by eating with the same spoon, drinking out of the same vessel, and smoking with the same pipe. The

first authors make no mention either of gonorrhœas or ulcers in the privy parts; and the above Dr. Bowman, in his report to the English government, says, that the patients in Canada lose their noses, eyes, tongues, and portions of the extremities, without the least affection in the genitals; and this proves, that a person may be poxed to the bones, without having contracted the disease by coition, without having either gonorrhœa, ulcer, or any other disease in the organs of generation (vid. tom. ii. ch. xv.) On the contrary, in Europe it is very rare now to see a patient affected in the body, without being preceded by some discharge or ulcers in the privy parts. By reflecting that the pocky eruptions on the skin, and principally in the face, was the characteristic symptoms of the disease in the fifteenth century; that this had a great resemblance to the *Yaws*, as well in its manner of often communicating without coition its other symptoms and progress, and also in the cure of both being absolutely the same; by reflecting, I say, on this great resemblance between the pox of the fifteenth century and the African *Yaws*, I am no more surprised that SYDENHAM, and many others before him, advanced as a great probability, that the venereal disease came originally rather from Africa, than from America or the Caribbee Islands, as it was so long and generally known in Europe.

It has been objected to this, that from the observations of many practitioners, the *Yaws* never

attacked the same person twice. We shall show in chap. xv. and xvi. tom. ii. that the Canadians and the Scotch were under the same idea respecting their several disorders. Have I not even a right to say too, that the venereal disease never attacked a man more than once, that it has disappeared or no longer exists in Europe, because I see no more this hideous symptom, which was its faithful companion, inseparable and characteristic from 1493 to 1520, and perhaps even to 1550? If the negroes have ulcers, spots or pustules on the skin, pains in the bones, exostoses, &c. without any *wart-like eruptions*, enlightened practitioners will say, and no doubt decide, that these negroes are either sick of the pox or the syphilitic disease, just as they would say of their European countrymen, who have such excrescences at present, though not accompanied with *ichorous excrescences in the face*.

But after all we have said, it now remains to decide the main principal question. Whence comes this poison or specific virus, which produced the syphilitic disease in any part of the world whatever? Does it proceed from the virus of some other animal, as certain authors have insinuated? Is it engendered in the human body, or does it spring up out of the body, and then only develope itself, on being applied, by the air, by effluvias, or immediate contact? Must we consider these embryos of animal poison and these contagious particles as living beings, who, in their source of early youth, drive forward and

act with surprising energy, exhaust themselves by degrees, or else transported from their native country to a cold climate, degenerate by degrees, and at length die? It would be curious and useful to enquire, why these kinds of contagious disease become all of a sudden more violent at certain times, more venomous and fatal to humanity? Ought this effect to be specially attributed to certain particular exhalations, produced by the singular revolutions that take place on our globe? Must they be ascribed to certain complications or other causes totally unknown at present, or to the contact, with the vitiated matter of some sick animal, just as we see the ulcers on cows' teats, (named the cow-pox in England,) are produced on the hands of the person who milks them; or after dressing the sores of a horse afflicted with ulcers in the legs, called the grease, or sore heels in England? These questions will be perhaps for ever an enigma for those who make them their study; but whoever the following facts may come one day into connection with other discoveries; and this same motive engages me to place them here. I have said elsewhere, that other authors supposed the syphilitic virus to have been generated in man's own body, and that it is still engendered there sometimes, and that they attribute this effect in a peculiar manner to the flesh and eggs of the *Iguana* (a lizard). I do not deny the possibility of such an assertion; but hitherto positive facts are wanting to authorise us looking upon it as

true: it would rather seem they have confounded the effect with the cause, or have let themselves be deceived by appearances. It appears much more reasonable to me, to believe that the virus may lie hid a long time in the body, and that the Iguana's flesh, or any other cause, doe snot produce, but only excites or develops, its action in the body.

Other writers have advanced, that the syphilitic virus was engendered in warm countries, particularly in Africa, from the brutal passion of bestiality. I abandon these conjectures, and confine myself to such facts as may have some connection with this subject.

PAUW, in his *Recherches Philosophiques*, tom. i. says, according to the testimony of Vespuceius*, an eye-witness, that in many parts of Africa the women endeavoured to supply the natural defect of man's conformation by causing a most unnatural swelling of their yard: for this purpose, they applied, among other drugs, caustic and venomous insects, irritated to madness, that brought on a considerable and monstrous swelling by stinging them. According to *Pauw*, the primitive cause of the venereal disease, is due to the envenomed sting of these insects.

* *Mulieres eorum faciunt intumescere maritorum inguina in tantam crassitudinem, ut deformia videantur et turpia, et hoc quidem earum artificio et mordicatione quorundam animalium venenosorum; et hujus rei causâ, multi eorum amittunt inguina, quæ illis, ob defectum curæ, flaccescunt, et multi eorum restant ennuchi.* Relation d'*Albéric Vespuce*, imprimée en caractères gothiques, à Strasbourg, en 1505, chez Matthieu Hupfuff.

PLINY (the naturalist) observes, that men bitten by the scorpion, in Italy and in Spain, are affected with a violent priapism, and a lascivious desire (*satyriasis*) which is calmed by coition; but the woman, he says, suffers from the embrace.

The sting of an insect called *furia infernalis* becomes mortal. The bite of certain serpents and enraged animals produce the most extraordinary effects on the animal system.

I already remarked (tom. ii. ch. xvii.) that certain flies eagerly endeavoured to suck the ulcerated wounds of patients affected with the *yaws*; they often deposit the matter afterward on the skin of persons in health, and by this means infect a great many men almost at the same time.

In the course of this work I have unreservedly stated my opinions on the nature, action, and effects of the virus, as well as on the history of the venereal disease. The reader will please to distinguish all that is opinion or hypothesis, from theories established on positive facts and on faithful and numerous observations. These latter have alone a right to serve as a foundation for a more reasonable system in the treatment of these diseases. The former I have always pointed out by the expressions, *I think, it seems, it is probable, &c.* I never made use of them in any practical consultation; I have specially inserted them to stimulate young physicians in their enquiries after truth; I in no manner

adhere to them, and consequently shall never enter into any critical dispute on the subject.

After having presented these remarks on the nature and history of syphilitic diseases, let me be allowed to make some observations on the method at present made use of in their treatment, and to consider how far an enlightened policy, in this respect, has contributed to alleviate the misfortunes of humanity.

I know of no branch of physic, that has been so much improved as the treatment of all the syphilitic disorders. I am bold to say, it partly proceeds from the physicians being as much exposed as other people: from this, on one hand, more frequent occasions to examine the symptoms and progress of the disease daily and more minutely arise; and on the other, the most powerful motives for relieving the pain, and completing the cure. So that, I believe, among all the diseases to which man is liable, there is not one so easily and effectually cured, at present, as a recent venereal infection by an enlightened physician; while on the contrary, either neglected or treated by ignorant practitioners, it often becomes dangerous, incurable by mercury, and even fatal to the patient. It is a known fact, that many persons, by improper treatment in this disease, have been made to suffer and fall away more, than they would have done had they abandoned themselves to nature. And still there is perhaps no one disorder, in which there are more pretended men of talents

than in the treatment of this : and yet among the crowd of mountebanks, not one is to be found, who does not arrogate some superior information to himself, or the receipt of some secret composition, he administers indistinctly, as an infallible remedy in this disease, to every one indiscriminately. By these means, with consummate impudence, they impose on persons who have the misfortune to fall into their hands, and who sooner or later never fail being severely punished for their credulity ; for nothing is more certain, than that to be able to cure this disorder in every stage and modification, much discernment and choice are not only necessary in the application of the remedies, but also a perfect knowledge of the patient's constitution, the nature and degree of the disorder with all its complications, &c. ; all which can be only the fruit of study, meditation, and experience. This is the reason why it requires more than common experience to be able to cure a confirmed *lues*, or neglected syphilitic affections, radically. The crowd of unhappy victims to ignorance and rapacity which daily present themselves, are so many proofs of the truth of my assertions.

The most respectable authorities now leave no doubt, but that the syphilitic virus was much more violent formerly than at present, and often caused death. This difference in the nature of the virus is attributed to a supposition of its being in its highest state of malignity on its appearance, but now naturally grown milder. This is

true, at least in some measure very probable ; and notwithstanding I have seen cases where this disorder was accompanied by the most alarming and obstinate symptoms. To say the truth, these accidents are in general very rare at present in these climates ; this amelioration, in the more enlightened countries of Europe, is due to the prompt succour afforded to the afflicted, to the degree of perfection to which the treatment is arrived, and particularly to the principles of humanity now disseminated, instead of the superstition and barbarity of former ages. We no longer abhor, we no longer expose in deserts and on dung-hills, these unhappy creatures ; we do not let them die, like the Kalmucks, who abandon their children and their brethren in the small-pox, without affording them the least succour. The youth of either sex are no longer slaves to former prejudices ; they apply earlier for advice, and are consequently much easier treated by skilful practitioners : and to this cause, in my opinion, is to be attributed the milder state and less frequency of syphilitic affections in Paris and London, than in any other capitals in Europe ; it is not because the lower classes have hospitals and charity-houses, where they receive advice and medicines from unprejudiced and enlightened persons ; but that even the common prostitutes, who fear or shame might deter from going to these hospitals, have no difficulty in finding a practitioner, who treats them without any remuneration.

This is so far from being the case in other parts of Europe, and especially in small towns and in the country, where the generality of physicians, for want of the same means of instruction to form both heart and mind, have very confined ideas in general, and frequently the most superficial knowledge of this disorder. It is not long since I saw physicians and surgeons in different parts of Europe, who thought themselves authorised to reproach their venereal patients with their fault in a rude and inhuman manner, or suffer these poor creatures to languish, to render them more acceptable to the Almighty, looking upon themselves as the instruments of his vengeance, and supposing they were destined by heaven rather to afflict than to relieve them.

Enlightened governments strive to diminish the number of the afflicted, and relieve the disease, not by shutting up the sick in prisons and hospitals, for they are nearly synonymous ; but, on the contrary, by opening hospitals, clean, well provided, and furnished with every necessary for their relief.

In countries, where government pursues different plan, where the poor have no asylum, are exposed to perish of want during their sickness, and where they even dare not apply to medical men, for fear of being ill-treated or confined in the frightful houses appropriated to the treatment of these disorders; in these countries, I repeat it, I have often seen the most dreadful

effects of the venereal virus, and such as are unknown in the former.

It is very likely, when every other government shall follow the example of the wise ones we have just mentioned, that the venereal disease will still lose much of its remaining malignity, and the treatment become still easier and more effectual. This happy period will be the fruit of science and philosophy.

At least I have hitherto remarked, that the venereal disease is exactly less violent and less frequent in every country, in proportion to the degree of encouragement offered by government to the sciences, and to the progress they make in good and generous principles among the people. In consequence of these observations, I am persuaded, that, should any government adopt a judicious plan, with proper rules and restrictions, it would succeed, not only in rendering every venereal symptom less violent, but greatly in reducing the number of victims, should they not succeed in totally extirpating it.

But such an enterprise appears as yet incompatible with the ideas of our age; more enlightened and more humane, these advantages will be appreciated and the fruits of them taken up by our posterity.

Now in whatever manner this part of my work may be considered, the medical science will always be seen more advanced, in the history and treatment of the disorder in question, than in

any author who preceded, or any that have followed, since I published the sixth edition of this work: and I shall have completely attained my object, should I be able to show, as is my intention here, and as all philosophical physicians are persuaded, that the healing art is always advancing towards perfection, whenever it associates with it the light of every branch of natural philosophy.

A
TREATISE
ON THE
EFFECTS OF THE SYPHILITIC VIRUS
ON
THE GENITAL PARTS
OF
THE HUMAN BODY.

CHAPTER III.

“ Si quid novisti rectius istis,
Candidus imperti ; si non, his utere mecum.”

HORACE.

SECTION I.

*Of Blennorrhagias of the genital parts in general,
and of the Blennorrhagia in men in particular.*

BEFORE I enter into the details of this disorder, it will be proper to place before the reader the reasons which have induced me to change the name it has received hitherto, and to justify the new name, which I have substituted for the old one.

Authors have mentioned this disorder under various names; they have called it *Gonorrhœa*, *Gonorrhœa virulenta*, *Gonorrhœa maligna*, *Gonorrhœa venerea*; and particularly in women, *fluor albus malignus, seu venereus*. The word *gonorrhœa* is derived from the Greek words Γενή, *genitura*, seed, and Ρεω, *fluo*, and signifies *fluxus seminis*, a flow of seed. This denomination is very improper as designating the disorder treated in this chapter; it leads into error, both respecting the nature and the treatment of this disease, by presenting the idea of a discharge of seed, which never takes place in the disease which we speak of here.

The matter which is excreted from the genital parts of either sex in this disease, being, as we shall soon see, a mucous humour, or real *mucus*, changed only in colour and quantity from its natural state, and resembling a purulent matter, it appeared to me, that the name of *blennorrhagia*, which comes from the Greek words Βλεννα, *mucus*, and Ρεω, *fluo*, was more appropriate to its nature; and as there are two very distinct diseases in which this discharge takes place, one accompanied with symptoms of local inflammation, the other without inflammatory symptoms, I have endeavoured to characterise each by a simple difference of termination of one and the same word, calling the first *Blennorrhagia (Blennorrhagia, seu muci-fluxus activus inflammatorius)*; and the second *Blennorrhœa, (Blennorrhœa, seu muci-fluxus passivus non inflammatorius)*: as if

we should say, a mucous discharge with inflammatory symptoms, and a mucous discharge without inflammatory symptoms.

Similar mucous discharges may take place in other parts of the body, which are not the object of this work; we only speak here of blennorrhagias and blennorrhœas of the genitals.

But, as a discharge accompanied with inflammatory symptoms may proceed from different causes; in order to characterise more particularly the nature of the disease of which I am now speaking, and to distinguish it with precision from all other similar discharges from the genitals, which, till now, have generally been confounded together under the very improper name of *gonorrhœa*, I have added the word *syphilitic* to that of blennorrhagia, to denote a discharge from the genitals of both sexes, produced by the specific virus (*sui generis*), known by the name of the *venereal* or *syphilitic virus*.

I have chosen the latter term, because, as will be seen in the course of this work, these discharges, as well as several other diseases of the genitals mentioned in this treatise, may proceed from the venereal contact or coition, without being of a syphilitic nature, or partaking in the least of that specific virus.

In French this disease has been called *chaudé-pisse*, on account of the smarting pain which the patient feels in making water.

The English call it *clap*, from the old French word *clapiers*, which meant certain fixed places

in different quarters of a town, kept and inhabited by public prostitutes, as is still seen in some of the great towns in Italy.

By the general name of blennorrhagia, I understand a discharge of a mucous puriform matter from the orifice of the urethra or prepuce in men, and that of the vagina in women, accompanied with inflammation, and heat or smarting, a pricking burning pain, especially during the emission of urine. This inflammation is produced by the action either of the syphilitic virus, or any other irritating matter applied on those parts. If it be the syphilitic virus which causes the discharge, the disease must have the specific name of *syphilitic blennorrhagia*.

The syphilitic blennorrhagia, therefore, is a contagious discharge of a greenish-yellow or puriform matter, which proceeds from the mucous glands of the urethra and the membrane which lines that canal, or from the glans in men, and the interior of the genital parts in women. This matter is very acrid and contagious, that is to say, when it is applied on the surface of the body of a sound and healthy person, it occasions an irritation, and inflammatory symptoms, more or less violent. In this chapter I shall give an exact description of this disease as it appears principally in men, leaving that of women for the next chapter.

This disease commonly shows itself three or four, sometimes five or six days, rarely later,

after an impure coition, by the following symptoms: The patient feels a peculiar and disagreeable sensation at the end of the penis, a sort of titillation and slight itching, which are felt in the part of the urethra placed immediately under the frænum, and which last one or two days; the following days, the orifice of the urethra becomes very sensible and red; it swells, and a limpid or light yellow matter, which stains the linen, oozes or runs out of it. While the discharge of this matter takes place, the titillation becomes stronger and more painful, especially during the emission of urine, which leaves a burning impression and an acute pain in the part affected. In some persons, the first symptom which appears is a discharge of thick mucus; in this case, the patient feels a burning and painful smarting in making water. These symptoms commonly increase in three or four days; sometimes, however, that does not sensibly happen till eight or ten days after. The glans becomes of a deep red or livid colour; the discharge increases; the matter is of a yellow or greenish-yellow colour, and resembles diluted pus. The swelling of the glans, and even of the whole penis, becomes considerable; the patient frequently wants to make water, and feels, especially when he has been some time in bed on his back, frequent and involuntary erections, so painful that they disturb his rest, and even force him to get up.

Such is the ordinary course of the disease,

when the inflammation of the mucous membrane is simple, slight, and superficial.

But in other cases, the inflammation extends and penetrates deeper into the cellular membrane, and even into the reticular substance of the *corpus spongiosum* of the urethra; the pain then becomes excessive during the erections, because the frænum of the glans is drawn down as if with a cord, while the body of the penis is raised upwards by the violence of the erection: this is what has been called a clap with a *cordée*. In this state, it often happens, that the vessels of the urethra burst, which occasions a considerable hemorrhage. At other times, the matter of the discharge is mixed with streaks of blood; the prepuce also is sometimes so much inflamed and swelled at the same time, that it cannot be turned back to discover the glans, or, when it has been turned back, it cannot again be drawn forward. In some cases, though indeed rare, the strangulation which accompanies the latter accident produces all at once a mortification of the glans; it may even occasion the death of the patient.

Symptoms and Progress.

In some persons, one or several of the inguinal glands grow large, hard, and very sensible or painful, and a symptomatic fever comes on. Then often the glands and lymphatic vessels of

the penis swell ; a sort of cord or knots are felt on the upper part of the penis, and the skin is also swelled and painful. Besides the symptoms I have just described, the patient, either by his own fault, or by injudicious treatment, often feels a peculiar uneasiness, with tension and tumour of the spermatic cord and testicles, accompanied with a diminution, or even a total suppression of the discharge from the urethra. In other cases, the complaint is aggravated, and the irritation and inflammation extend all along the canal of the urethra. All the symptoms become then more violent : the pain which is felt on making water, in the perinæum, or further back, is so sharp, that the patient dreads making water, at the same time that he is very frequently urged to it by a fatiguing and troublesome titillation, which is felt at the neck of the bladder, and in the anus ; he has a perpetual desire to make water, while he can only pass a few scalding drops at a time. The whole canal of the urethra is swelled and in a state of tension ; the patient has frequent erections, and feels lancing pains through the canal, through the perinæum to the anus ; he cannot stand on his legs, nor remain sitting, for any length of time. In this state, the swelling of the mucous glands of the urethra often obstructs the passage of the urine, which comes out in a little spurt or bifurcated ; and if, at the same time, the virulent discharge diminishes considerably, or stops totally, an entire retention

of urine often comes on, caused by a constriction or inflammation of the neck of the bladder, or a swelling, or real inflammation of the prostate gland, and other neighbouring parts.

In other cases, streaks of blood, or even pure blood, comes out of the urethra, and evident marks appear of an ulceration of the urethra, which is soon followed by a general infection.

Sometimes the inflammation of the urethra becomes so violent, that the internal surface of that part, and the orifices of the glands which line it, yield no secretion; which is likewise observed sometimes in the inflammation of the mucous membrane of the nose and lungs in severe colds. All discharge is then stopped. It is this state of the disease which some authors have described by the improper name of dry gonorrhœa. (*Gonorrhœa sicca*).

When the inflammation has come to a high pitch, the erections become very frequent and excessively painful, insomuch that the penis instead of taking the ordinary direction remains bent; this state of the disease is called *cordée*, as I have said above.

After these symptoms have continued with more or less violence, or have increased for one, two, or three weeks, and sometimes even six or seven, according to the difference of regimen, or method employed, they begin to diminish by degrees. The difficulty and frequent desire of making water decrease; the erections are less painful; the matter has more consistence; it

threads between the fingers; in short, the discharge disappears entirely. In other cases, and more commonly, the inflammatory symptoms disappear by degrees, but the discharge continues for weeks, months, and even years: this constitutes the disease which I call blennorrhœa. *obscure.*

Sometimes the inflammatory symptoms of blennorrhagia disappear gradually, leaving behind them in the urethra an ulcer which never fails to maintain an obstinate discharge, really purulent or ichorous, and occasions a general infection of the body; this is the complicated or ulcerated blennorrhœa. (*Blennorrhœa complicata seu ulcerosa.* See chap. iv.)

In other cases, there remains a stricture, a callosity, or an excrescence in the urethra. Sometimes, again, the syphilitic blennorrhagia produces, as I have remarked above, during the highest degree of inflammation, a dangerous and mortal paraphimosis, at other times a swelling of the testicles, an induration of those parts, or of some glands of the urethra, an inflammation or scirrhus tumour of the prostate gland, with a retention of urine more or less complete, more or less painful and dangerous. Finally, at other times, though more rarely, the suppressed discharge produces all of a sudden a complete deafness, or most violent ophthalmia, or the most evident symptoms of syphilis.

Exciting cause.

The exciting cause of syphilitic blennorrhagia is always the specific virus applied to the mucous membrane, or to the orifices of the excretory conduits of the mucous glands of the urethra, or to the glans in men, and the internal surface of the genital parts in women.

It is not always necessary, as many patients imagine, to introduce the penis into the vagina to get a clap; the most superficial contact of this part with an infected person is sometimes sufficient to produce this effect; and I have no doubt but that by going to the water-closet after a person infected with this disease, one is exposed to catch it, merely by touching or rubbing the end of the penis on a spot where there might be some mucus impregnated with this virus. The contagious fluid, applied to some parts of the body of a sound person, seems, however, to act with more or less difficulty, according to the difference of structure, the greater or less irritability of the part, and even the particular constitution of the individual; for we see people who expose themselves to all the dangers of infection, without ever being attacked with any complaint during their whole life. Perhaps the more or less violent action of this virus depends also sometimes on the greater or less degree of acrimony, or on the quality of the virus itself.

From my own observations, and those of several respectable practitioners, it is not true, as some writers have affirmed, that a clap is never caught but from a person actually affected with the same complaint. A woman sometimes gives a blennorrhagia without having the least appearance of this disorder herself.

Proximate cause of Blennorrhagia.

The syphilitic virus, like all other substances of an acrid, stimulating, or irritating quality, applied to the surface of the mucous membrane, or to the orifices of the mucous glands, more or less irritable, irritates them, increases their secretion, changes at the same time the consistence and colour of the secreted fluid, and produces a redness and heat with a painful tension in the part, that is to say, a local superficial inflammation of the mucous membrane, commonly called erysipelatous, or erythematous, (*Erythema*). However, in some more serious cases, as we have noticed above, the virus produces an excoriation, or even a real ulcer in the canal of the urethra, and the discharge is then not only mucous, but really purulent. The matter discharged from the effect of the irritation, always participates of the nature of the syphilitic virus, and consequently is contagious.

Seat of the Syphilitic Blennorrhagia.

The seat of syphilitic blennorrhagia in men, when it proceeds immediately from impure coition, is always placed at a very little distance from the orifice of the urethra, under the frænum, in that part of the canal where a dilatation is remarked, called by authors the *fossa navicularis*. There it occupies the excretory conduits of one or two mucous glands, called, after the discoverer, *lacunæ mucosæ Morgagni*. (See *Adversaria Anatomica*, in 4to.) All blennorrhagias, which have their seat further back in the urethra, in the bend of the penis, in the *veru montanum*, in the neck of the bladder, or in the bladder itself, are owing to bad treatment, or some cause which has stopped or suppressed the primitive discharge; or else they owe their origin either to an internal cause, or to an acrid matter deposited from the mass of the blood.

Sometimes, by the natural progress of the disease, and oftener by the faults committed by the patient, or from the effect of improper remedies, the irritation and inflammation are subject to change their place; they then often occupy at the first bend of the penis the orifice of a mucous gland which opens in that part; at other times, they occupy lower down the orifices of the excretory conduits of two glands, called, from the name of the discoverer, *Cowper's*

glands. Sometimes, again, they occupy either the protuberance which covers the orifices of the seminal vesicles, and which is called *veru montanum*, or *caput gallinaginis*, or the orifices of the prostate gland, which open round the *veru montanum*; they are also seen to occupy farther back the prostate gland, or the neck of the bladder itself.

In the first case, the pain and heat of urine are felt under the frænum; in the second, these symptoms take place at the first bend of the penis; in the third, the pains and heat have their seat in the perinæum; in the fourth, the *vas deferens* and the *epididymis* are affected; in the fifth and sixth, the pain and other symptoms are principally felt near the anus, and there is then often a total retention of urine. But, at the same time, the pains and other symptoms of irritation in the posterior parts of the urethra, are often merely and entirely sympathetic, and proceed from the violent degree of inflammation in the *fossa navicularis*, without the disease having changed its original seat.

In some cases, indeed much more rare, the virus or contagious matter does not penetrate during coition into the urethra; but applied to the end of the penis, it fixes on the crown of the glans, and there irritating the excretory conduits of the sebaceous glands, produces a discharge which has been named a gonorrhœa of the glans, and which I call a blennorrhagia of the glans (*Blennorrhagia balani*).

I shall speak, in the following chapter, of the seat, symptoms, and progress of the syphilitic blennorrhagia in women.

Modern practitioners have well observed that in the virulent gonorrhœas of women, there is hardly ever, or at least very rarely, any ulcers in the affected parts : it was therefore very natural to conclude that there were none likewise in the same disease in men. But the general prejudice, contrary to this opinion, was so rooted in the head of practitioners, that neither this analogy, nor the conclusions drawn from the dissections of bodies by the celebrated *Morgagni**, could overturn the opinion that wherever there is a discharge of puriform matter, there is an ulcer. A direct and precise observation of the late Dr. *Stoll* shows evidently the contrary. On opening in its whole length the urethra of a man who died in an hospital, while affected with what is called a venereal clap, the internal surface was found redder than in the natural state ; two of the lym-

* In Morgagni's work, *De sedibus et causis morborum*, so instructive in every respect, we find observations on dissections of bodies of men who, during their lives, had had several blennorrhagias. In a great number not even the smallest cicatrix was found in the urethra ; but in those who had died after having suffered much from the consequences of this disease, strictures were seen of one or more parts of the urethra ; rarely any excrescences or protuberances in the canal, sometimes ulcers, sometimes scars of ancient ulcers, or an obliteration of the conduits of the mucous glands ; the prostate gland fungous or scirrhous ; in fine the bladder itself attacked or altered in its structure.

phatic vessels were white, and so swelled as to be visible to the naked eye; a puriform matter oozed through the internal membrane of the urethra, particularly in the *fossa navicularis*, which was the seat of the disease; but there was not the slightest appearance of ulcer or even of excoriation. Several practitioners, who are as anxious for the progress of the art as myself, have confirmed this fact by dissections, and perceived the same effects of the virus in the same place, or further back in the urethra.

From all that I have just said, I think I may assert with safety, as positive facts, the following points:

1°. The blennorrhagia of the urethra is a local inflammation, which consequently seldom affects the entire system.

2°. It is a mistake to think that the discharge proceeds from an ulcer in the urethra. Of ten or twenty blennorrhagias in consequence of a contagious copulation, there is not perhaps one with a real ulcer. The disease is simply a superficial inflammation of the mucous membrane which lines the interior of the canal of the urethra, or of the excretory orifices of the mucous glands of the urethra in men, or of the internal membrane of the *labia*, orifice of the urethra, *nymphæ*, or vagina in women. This complaint may be compared aptly enough to the inflammation of the mucous membrane of the nose, or lungs, in a cold or catarrh.

3°. The matter of the discharge, though purulent in appearance, is never, in the ordinary cases of the disorder, a real pus, still less corrupted semen, as several physicians and many patients imagine. We see, from what has been said chap. i. that *Serapion*, and all the other old authors, principally the Arabians, reasoned on this subject nearly as almost all the physicians in Europe did only forty or fifty years since. Seeing a discharge of puriform matter from the urethra, they always supposed, and pronounced without hesitation, that this matter was corrupted semen, or real pus proceeding from ulcers in the urethra. Nevertheless it is generally nothing but *mucus* secreted in greater quantity than in the natural state, and altered in its colour and consistence by the acrid virus applied to those parts, precisely as it happens with the mucus secreted from the nose during what is called a cold in the head. This fact once established, it will no longer be surprising, that after so abundant an evacuation as is often observed in blennorrhagias, patients, at the end of several weeks or months, are so little weakened. For if the matter evacuated were real pus or semen, we should certainly find that the constitution and strength would, in blennorrhagias in general, be much more essentially altered.

4°. In order to characterise the specific nature of the syphilitic blennorrhagia, and to distinguish it with more precision from all blennorrhagias proceeding from other causes, I have said,

that this discharge is produced by an irritation which the syphilitic virus exerts on the affected part.

As these different assertions are of the greatest importance to patients as well as practitioners, and have been called in question by several modern authors, I think it necessary to examine the subject thoroughly, and the more so, as what I have advanced is confirmed by very solid arguments, and by a great number of new facts which I shall now state.

There are theorists who have denied that blennorrhagias proceeding from impure cohabitation are produced by the virus applied immediately to the cavity of the urethra; they have maintained, that the virus is absorbed by the lymphatic vessels of the glans, and afterwards deposited in the *fossa navicularis* under the frænum. I answer, that if such an absorption really took place, we should not fail often to observe original or primitive blennorrhagias, the seat of which would be further back in the cavity of the urethra; but of this there is not perhaps an example. I have constantly observed that the seat of the discharges which follow cohabitation or immediate contact, was always, in the origin, in the mucous lacunæ of Morgagni, under the frænum; and that those which had their seat in the bend of the penis, or further back in the canal of the urethra, in Cowper's glands, &c. never occupied, according to very precise and multiplied observations, those last

places at the beginning of the complaint, or else proceeded from an internal cause. What is said of the impossibility of this immediate application of the virus to the interior of the urethra, because its orifice, being exactly closed during erection, cannot consequently allow its introduction, only seems founded on a vague and illusive theory. It is therefore more probable that the blennorrhagia, which follows an impure coition or contact, is owing to a virus or acrid matter immediately applied to the orifice of the urethra, whence it is afterwards absorbed, or, if I may so express it, pumped during coition into the cavity of the urethra as far as the *fossa navicularis*, where it meets the first mucous glands.

The second point which I wish to attack is the hypothesis, lately advanced, on the nature of blennorrhagia or virulent gonorrhœa, by some English authors. Seeing that discharges from the genitals sometimes took place, without the least probability, or even with the impossibility of a syphilitic infection, they pretended that the virus which produces gonorrhœa, was not the same as that which produces chancres or syphilis, and that the virus or acrid matter which produces blennorrhagias, is generally and always of a different nature from the syphilitic virus; in a word, they have maintained, that there is no syphilitic or venereal gonorrhœa, properly so called, and that consequently, the existence of a syphilitic blennorrhagia was only founded in theory. To

confirm this reasoning, they pretend that the virus which causes claps never produces chancres, nor any syphilitic symptoms in the general system, and that the syphilitic blennorrhagia is consequently an imaginary disease.

I answer to this, that though it is not very common to see blennorrhagias produce a general infection, it is not however very rare, especially in great towns, to see blennorrhagias followed by those symptoms. I have certainly seen several examples of ulcers in the throat, and other evident symptoms of *syphilis* appearing in the body in consequence of a blennorrhagia, without there being the least appearance of chancres, either on the thighs or genital parts; and I have no doubt, that many attentive practitioners may have observed the same thing. These accidents are principally observed after blennorrhagias, the symptoms of which are more violent than usual, or in which the surface affected was of great extent. For this last reason, the general infection of the body oftener occurs in women than in men.* And in all syphilitic blennorrhagias attended with ulcers in the canal of the urethra, I have seen it but too often followed by evident symptoms of syphilis in the throat, and even in the bones. The reason why symptoms of syphilis so seldom appear after syphilitic blennorrhagias is,

* I have treated many women, who, without ever having had chancres, have had, in consequence of violent blennorrhagias, ulcers in the tonsils, or other syphilitic symptoms; and have been cured by the internal use of mercury: I have seen the same happen to men.

that, in general, in this case, the syphilitic virus being applied to the urethra, only produces a superficial inflammation in it, and seldom causes ulcers, which give occasion to the absorption of the virus into the blood. In fact, the inner membrane of this canal is defended by a great quantity of mucus, the secretion of which is increased to a considerable degree, when these parts are exposed to any irritation whatever; but as long as the mucus is secreted so abundantly, the virus is much diluted, the sides of the urethra are defended, and consequently the formation of an ulcer hindered. But if this secretion comes to be diminished, either by the violence of the inflammation, or by any other cause, such as injections or remedies contrary to the disease, I maintain, from repeated observations, that in ten such cases there will be nine in which the excoriation or ulceration of the urethra will follow, and will produce syphilis as certainly as syphilitic ulcers, situated in any other part of the body.

If between the prepuce and glans, there were a secretion of mucus as abundant as in the urethra, ulcers would be as rare there as they are in the urethra. In the case where the syphilitic virus occupying the crown of the glans, excites in it a secretion of mucus more abundant than common, no ulcer is observed, but a considerable tumour, attended with a copious discharge of puriform mucus, like that which takes place in blennorrhagias of the urethra. It is from

this resemblance that the disease has received the name of false gonorrhœa, to which I have substituted that of blennorrhagia of the glans.

The same thing is observed in women, and for the same reason, they have seldom ulcers in the vagina, which is always moistened with mucus; but they have them oftener in the nymphæ, and very frequently in the labia.

The partisans of this opinion maintain likewise, on the same principle, that the virus of the gonorrhœa or clap never produces chancres, and that the virus of chancres never produces a clap. According to this assertion, they pretend that a person who has chancres only communicates chancres; and one who has a clap can only communicate the latter complaint. I do not deny that this often happens so, but frequent observations have also convinced me, that this assertion is far from being generally founded. I know many cases where patients affected with a blennorrhagia without any ulcer, communicated chancres, and reciprocally. It happens unfortunately but too often, that a prostitute, affected with a syphilitic disease in the genitals, gives one man a clap, another chancres, and a third both at once. The chancres often appear in the course or towards the end of the blennorrhagia; sometimes the blennorrhagia comes on after the ulcers, and even after the latter are healed; at other times in fine, and these cases are not rare, they both appear at once.

Another fact seems also to demonstrate this

truth ; it is, that if a man attacked with a blennorrhagia does not keep the glans and prepuce very clean, it often happens, even some time after the discharge is considerably diminished, that chancres or syphilitic ulcers come on, which finally produce buboes or other syphilitic symptoms, the cause of which can only be properly assigned to the same matter that produced the blennorrhagia. This is one of the principal considerations, which, in all blennorrhagias, should make us insist on the precept of attending with care to the cleanliness of the glans and prepuce.

The observations I have just made are confirmed by a direct experiment of Dr. *Harrison*, who, by his genius and essays, has so well merited of the branch of medicine which forms the subject of this treatise. Having introduced into the urethra matter taken from a syphilitic ulcer of the glans, he by this means produced a blennorrhagia.

I well know, that the late John Hunter, in his *Treatise on the Venereal Disease*, denies these facts, and has questioned the possibility of the matter of a blennorrhagia, or even of chancres, taken and applied on another part of the body of the same patient, ever producing ulcers. The same author, according to the same principle, attributes the clap and chancres which attack at once the penis of the same man, to two poisons or acrimonies of a different nature. But I must consider these assertions as rash, until they are

supported by exact and repeated facts and observations.

To prove that the virus, which produces the blennorrhagia, is not the same as that which produces syphilitic symptoms in the body, it has also been asserted, that mercury never contributed to the cure of a clap, and that all claps could be cured without employing mercury.

I allow that it is true, and ascertained by well-known facts, that not only many blennorrhagias are cured, but that most can be cured, and ought even to be treated without mercury. I have hundreds of examples of it well proved. Nature alone often cures this disorder, if we allow her to act without disturbing its operations; and I know several cases, where, without any remedy whatever, and only by the use of simple water or lemonade as a beverage, the virulent gonorrhœa has disappeared.

The secretion of mucus from the urethra is increased by the irritation excited by the acrimony of the virus, in the same manner as the secretion of tears is when a foreign body falls into the eye, and irritates that tender organ, with this difference only, that, in the first case, the irritating body is a chemical stimulus, in the latter mechanical. This abundant secretion of mucus serves to dilute the virus, as efficaciously as could be done by all the remedies of art. The virus is thus not only diluted, but also partly carried out of the body by the continual discharge of the mucus, which serves as a vehicle to it;

and modern practice, by the use of mucilaginous or oily remedies, internal or external, has no other object than to assist nature in this salutary operation.

It is therefore indubitable, that in this case, and principally when the blennorrhagia is without any very serious symptoms or ulcer, it may be radically cured without employing mercury; and that if it be employed in similar cases internally, it will produce no effect on the local complaint, not because the disease is not syphilitic, but because this same virus happens to be out of the circulation, and consequently out of its action. But mercury applied locally in syphilitic blennorrhagias of the genitals, especially in women, very often cures these complaints, and very promptly, without any other remedy internal or external. As to syphilitic blennorrhagias of the genitals of both sexes, attended with excoriations or ulcerations, daily experience teaches us that discharges of this kind, not only are cured more speedily and more safely with mercury, but moreover that they commonly prove incurable if it be neglected. Experience proves besides, that the habitual discharges which commonly follow these blennorrhagias, often yield speedily to mercury, after having resisted for a long time a great number of other remedies. I can even assert, that we know no other remedy more advantageous in these cases than mercury.

We do not then deny, that a blennorrhagia, especially in men, may be often radically cured

without mercury, and without being followed by a general infection of the body; but those are greatly deceived, and it is dangerous to persuade patients so, who believe that a blennorrhagia can never produce syphilis in the system, as the late Benjamin Bell maintained.

Several examples have completely convinced me, that the absorption of the virus sometimes takes place in simple syphilitic blennorrhagias, especially when by a bad treatment they occupy a great extent in the urethra, or else when their seat is very far back in that canal, and particularly near the bladder. This accident is still more common in women. I have seen other patients, in whom the accidental wound of a little blood-vessel in the urethra, by the awkward application of a syringe or sound, has occasioned the absorption of the virus, which has afterwards produced very evident syphilitic symptoms in the body; but which, though proceeding from a blennorrhagia, have yielded very quickly to mercury.

We may therefore conclude, that if there are blennorrhagias which are cured without mercury, there are some also, and even simple ones, which require the use of this remedy, and cannot be radically cured without it.

As this matter is very important both for physicians and patients, I shall relate some observations I have had occasion to make, and which will place these truths in a better light.

At the age of twenty-four I caught a blen-

norrhagia, for the first time, without the least appearance of chancres. The discharge having been imprudently stopped by the use of purgatives, a total retention of urine followed. I consulted a surgeon of my acquaintance, who, seeing that I could no longer support the pain occasioned by the distention of the bladder, had recourse to the catheter; but the instrument, when arrived at the *veru montanum*, met with an obstacle which hindered it from penetrating any further, though the surgeon neglected no means to pass it. After having waited a few moments, he made a new attempt, but with no better success. As the pain increased, and the accumulation of urine threatened a rupture of the bladder, he tried again, and at length forced a passage with the least violence possible. This effort produced a discharge of some drops of blood from the urethra, and was followed by a copious evacuation of urine. By means of proper treatment I was delivered in a few days from this terrible symptom; the discharge appeared again, and in three weeks I considered myself radically cured. But some weeks after I was awoke during the night by a pain in the middle of the sternum, which I took for a rheumatic pain: in a few days, it became more violent, and was attended with a swelling of the bone itself. I then began to suspect the nature of the complaint; I had recourse to mercury, and found myself much relieved, and was perfectly cured in five weeks. Now I ask any impartial person,

who has reflected on this observation, if it is not reasonable to think, that on forcing the passage with the catheter, some vessel was wounded, and occasioned the absorption ; so that I was infected from that instant, and afterwards cured in the same manner as if the infection had taken place by a chancre.

A man about forty years old, who had formerly had different blennorrhagias, but of which nothing had remained for five or six years past, got a fresh one. This, according to his account, was mild for the first five or six days, did not give him much pain when he made water, and hardly any in erection ; but having taken some violent exercise, he felt a greater irritation all along the urethra, and especially towards the neck of the bladder. All he did was to take a mercurial purgative, and rub the perinæum every day with mercurial ointment. The symptoms were almost entirely dissipated in a week ; and there only remained a slight dull pain in the perinæum. But the complaint for which he consulted me was a pain in the *cartilago xyphoidæa*, so acute that he could not even bear it to be touched. I advised him to continue the frictions with mercurial ointment on the perinæum for some days. When I saw him again the pain was not diminished ; but having quitted its first seat, it then occupied the middle of the sternum, and he had been tormented by it especially during the preceding night. I gave him mer-

cure internally, and he was cured in a short time.

Hitherto I have answered the arguments that have been used to prove that the virus, which produces "gonorrhœa," is different from that which produces syphilis; or, in other words, that a blennorrhagia never proceeds from a virus of the same nature as that which causes the syphilitic disease in the system.

I now come to a different discussion. While some English writers reasoned in this way on the non-syphilitic nature of all blennorrhagias, most of the French physicians and surgeons maintained, and still maintain, in great part, an opinion directly opposite. According to them, every "clap" is "venereal," or comes from the same virus, which being absorbed into the mass of the blood, there produces syphilis. Hence that general routine of prescribing a mercurial course, or that rage, if I may be allowed the expression, for giving corrosive sublimate to all patients affected with a "clap."

The same scepticism, enlightened by sound philosophy, which I applied to the study of medicine, and which has prevented me from adopting many propositions asserted by professors, has made me very reserved of adopting general propositions in medicine; and more especially has made me doubt the truth of both the preceding assertions. I am convinced that the partisans of both opinions have been led into error, as too often happens, by the small

number of facts which they have had occasion to consider closely. They drew from them a general rule, which was afterwards blindly adopted on both sides, by the herd of practitioners, who prefer an indolent and daily routine to a painful application of care and reflection. In fact, to pretend that the virus, which produces blennorrhagia, is never syphilitic, is to say, that the syphilitic virus, applied to the urethra and vagina, is not capable of producing a discharge from them ; it is much the same as if it were said, that the virus, which produces ulcers in the genitals of both sexes, is always of a syphilitic nature, and that no other acrimony or acrid matter could ever produce an ulcer.

I had long suspected that there are blennorrhagias or gonorrhœas that are not of a syphilitic or venereal nature ; not that I mean a real gonorrhœa or fluxus seminis, nor a discharge of the liquor from the seminal vessels or prostate gland, but discharges which have been considered till now as syphilitic claps or gonorrhœas. Different observations soon confirmed my suspicions. I had already observed a greenish-yellow discharge from the genitals of stallions and mares, especially when they begin to be at heat. I saw that this discharge lasted several days, and then ceased spontaneously. I had made the same remark on dogs, who did not seem to suffer much from this circumstance. Finally, I found that children of both sexes have sometimes, during dentition, a discharge from the

genitals of a puriform matter, exactly like a gonorrhœa as it is called.

In the course of an attentive and pretty extensive practice, I have seen several patients, in whom the discharge, though very like in colour, consistence, and other symptoms, to a syphilitic blennorrhagia, was of such short duration, that it did not appear to me probable that it was syphilitic. Among others, I knew a young man, who, at the age of seventeen or eighteen, had a discharge two or three times, which could not be syphilitic, as he had never known a woman. This discharge would last three or four days, and go off without any remedy.

In other cases, the symptoms which attended the discharge were so mild, or were preceded by such circumstances, that they could not reasonably be attributed to a syphilitic cause. In fact, I have known married persons, who lived in perfect harmony, one of whom was affected with such a discharge for several days, without the other having the least complaint. Being intimately connected, by my profession, with some of these families, I was certain, not only that the married couples were faithfully attached to each other, but that their situation in the country, and the persons whom they frequented, rendered a syphilitic infection, if not impossible, at least quite improbable.

One of the most enlightened physicians in Europe, lately dead, and who was a friend of mine, having read the preceding observations in

the first edition of this treatise, published at Edinburgh in 1784, communicated to me a valuable fact. He had had several "claps" in his youth, of which he had been radically cured many years. He afterwards married, and lived very happy with his wife for sixteen or seventeen months. At this period he found himself affected with a discharge, attended with the ordinary symptoms of a clap. As he had nothing to reproach himself with, he began to suspect his wife, and insisted on her submitting to inspection and examination; but neither then nor afterwards could he discover any sign of disease. His symptoms went off gradually of themselves in ten or twelve days, and on the fifteenth day the discharge had entirely ceased. The same accident happened to him two or three times since, and the discharge never lasted above a few days. His wife always enjoyed good health to a very advanced age, and nothing disturbed this happy union, which produced a numerous posterity. I shall merely observe, that this woman died at the age of sixty-eight or seventy of a cancer in the womb, which she had had for about ten years.

Could I help being convinced by all these observations united, that certain discharges owe their origin to a cause, external or internal, different from the syphilitic virus? Was it not natural to conclude, that any virus or stimulus whatever, syphilitic or not, provided it had strength or acrimony enough to produce an irrita-

tion, and consequently an extraordinary secretion of the mucus of the urethra or vagina might also produce a discharge like a clap; just as in a cold of the head or chest, the action of a cause, which is certainly different from the syphilitic virus, produces a more abundant secretion, and of a different colour from that which the mucous membrane of the nose and lungs affords in the natural state. Nevertheless, to put this opinion out of the reach of every objection, and to establish a solid principle, the result of which I considered very interesting to humanity, and especially to every philosophical physician, I resolved, in 1782, to make a decisive experiment on myself. I determined to inject into the urethra a portion of a very acrid liquor, and to await the result.

With this view, I took six ounces of water, and added as much ammonia (caustic volatile alkali) as was necessary to give the mixture a very piercing, and, as it were, burning taste. I performed the injection at eight in the morning, compressing the urethra with one hand below the frænum, to hinder the liquor from penetrating farther, and to direct it exactly to the spot which is commonly the seat of the syphilitic blennorrhagia. At the instant the liquid touched the interior of the urethra, I felt such an insupportable pain, that I could not retain the injection above a second, I drew out the syringe involuntarily almost at the instant of the injection, and the injected liquid ran out.

But, though the pain was very violent for half a quarter of an hour, I resolved to make a second trial ; it occasioned the greatest pain that I ever felt in my life. However, I kept in the injection near a minute ; the pain then became so dreadful, that I could not support it any longer, and I drew out the syringe. I immediately felt a strong desire to make water ; but as I had taken the precaution to make water just before the injection, I resisted this desire. I lay down on a bed, and waited the event with patience. The pain was so acute that it was near an hour before I was able to stir. I amused myself with reading the rest of the morning, dined as usual, but went to bed early. I was then obliged to make water, which I had not done since I injected the liquor. When the urine came to the spot where the injection had stopped, I felt a dreadful pain, but not so violent, however, as I expected.

After having slept well all night, I was very eager the next morning on waking to examine the part. I found a pretty considerable evacuation of puriform matter of the same greenish-yellow colour as that of a virulent blennorrhagia ; the pain which the urine caused in passing was then much increased, and the following night my sleep was interrupted by involuntary and painful erections. The next morning the evacuation was much more abundant, and nearly of the same colour, except that it appeared to me a little more greenish ;

but the pain which I then felt on making water was so keen, that I resolved to appease it by injecting a little lukewarm oil of sweet almonds, which relieved me directly. The discharge continued during five days, and the pain diminished in a remarkable manner during that interval. But what gave me much uneasiness was, that I felt the effects of another inflammation, which was fixing itself further back in the canal of the urethra, in a spot where I had felt nothing before, and where not a drop of the injection could have penetrated. This new inflammation appeared to me to extend from the place to which the first had been confined, to a certain distance farther in the canal. It was followed by a copious discharge, attended with the same symptoms as before, and lasted six days, after which the symptoms were much alleviated.

But what was my astonishment, when after that time I felt very distinctly the symptoms of a new inflammation, which appeared to spread from the limits of the preceding one, towards the *veru montanum*, up to the neck of the bladder, and which was attended with a heat of urine, and a discharge as abundant as the preceding ! By this time I was seriously alarmed ; for I had not discontinued the injections with the oil of sweet almonds three times a day. I saw that the inflammation which the ammonia had at first excited was evidently communicating from one part of the urethra to another, which made me fear that an inflammation of the

whole internal surface of the bladder might follow, and have dangerous consequences. I remained in this state, between hope and fear, for seven or eight days ; but I found at last, to my great satisfaction, that this inflammation was appeasing by degrees, as well as the evacuation, without extending beyond the urethra ; and I was entirely delivered from all the symptoms of these three blennorrhagias, as I have reason to call them, at the end of the sixth week.

To the observations and the experiment I have just related, may be added a very interesting fact which Dr. *Oettinger* made known a few years ago, in a dissertation published at *Tubingen*. He relates that a person who had swallowed olive-oil, in which a certain quantity of red Turkey cotton had been steeped for some time, perceived soon after a discharge from the urethra, which had all the appearances of a clap. Pepper, the gum resin of guaiacum, and certain kinds of beer, often produce similar discharges.

It follows from this fact, that there are acrimonious substances, which, taken internally, are capable of producing the same symptoms as the ammonia applied externally produced in my experiment. I think I may draw, with the greatest degree of probability, the induction, that the virus, whether herpetic, or leprous, the cancerous ichor, or other *stimuli*, applied externally or internally, may produce the same effect, and that these blennorrhagias are exactly like a

clap produced by the syphilitic virus, granting at the same time, that in some cases their symptoms are much milder and of shorter duration. Nevertheless, in the experiment on myself, I could perceive no difference between the symptoms of this discharge and those which commonly attend syphilitic blennorrhagias. I have no doubt but that there are discharges produced by mechanical irritation ; for example, by an extraordinary effort in coition, or by masturbation. I also became convinced, during the course of my practice, that many of these non-syphilitic discharges, which I have mentioned, are often just as contagious ; and I am greatly inclined to think, that the blennorrhagias, of which many ancient authors make mention, belong to one or other of these species. Combining all these observations, and the inductions which I have thought myself justified in drawing from them, I shall establish the following species of blennorrhagias :

1°. The *syphilitic blennorrhagia* produced by the syphilitic virus, whether it be communicated by coition with a person affected by it, or applied by any contact whatever, or finally deposited from the mass of the blood in the urethra through the circulation.

This disease is simple or complicated, that is to say, without excoriation, or attended with ulceration in the urethra ; in the latter case, the matter of the discharge has the character of a real pus, or of an ichorous matter, (*Blennor-*

rhagia complicata seu ulcerosa.) This distinction is of very great importance in practice, because the blennorrhagia with an ulcer always requires the internal use of mercury for a radical cure.

2°. The *herpetic, leprous, scorbutic blennorrhagia*, &c. The gonorrhœa mentioned in Leviticus, as well as many of those noticed by authors who wrote before the appearance of syphilis in Europe, should, I think, be classed under this head. The herpetic virus, &c. often falls on the uterine system, and is discharged with the menses, or else it produces a real herpetic blennorrhagia, &c. sometimes contagious by coition. I have seen many striking examples of it.

3°. The *gouty blennorrhagia*, proceeding in persons subject to fits of the gout, from an inflammation of the same nature in the canal of the urethra. I have made numerous observations on this species of blennorrhagia.

4°. *Rheumatic blennorrhagia*, (*Blennorrhagia rheumatica seu catarrhalis*.) This species of blennorrhagia varies according to the seat it occupies in the urethra, the bladder, the uterus, the vagina, or the rectum. It is a real inflammation of the mucous membrane of those parts, resembling in every respect the catarrhal inflammations of the mucous membrane of the nose or lungs, &c.

Mr. *Winkler* has lately described a rheumatic and epidemic blennorrhagia of the urethra, which

is cured by the internal use of guaiacum, and by sinapisms applied to the calf of the leg.

Not only the gouty or rheumatic matter, but any other irritating matter or cause formed in the urethra, the bladder, the vagina, the uterus, the rectum, the lungs, or deposited from the mass of the blood on these different parts, acrid enough to produce a permanent irritation in them, attended with an inflammation of their mucous membranes, will excite a blennorrhagia or secretion more or less abundant of a puriform matter, which has been described by authors under different names, according as such or such organ was affected. Sometimes it was a blennorrhagia of the bladder, (*Cystirrhagia seu morbus mucosus vesicæ*), sometimes mucous hemorrhoids, at others a blennorrhagia of the rectum, called by authors *fluxus cæliacus*, at others a fluor albus or blennorrhagia of the vagina or uterus; again an ordinary recent catarrh, or a chronic affection of the mucous membrane of the lungs, (*Phthisis pituitosa*.) All these diseases are, as I have just said, so many real blennorrhagias or blennorrhœas, only differing in their seat, and the nature of which being well known, according to the principles laid down in this chapter, will often render their cure sure and easy, which till now was commonly thought very difficult, or even impossible.

5°. A *blennorrhagia* produced by some substance taken internally, or applied externally to

the urethra, if it be capable, from its acrimony, or stimulating power, of irritating or producing an inflammation and discharge from the urethra. The discharges produced by pepper, guaiacum, or other acrid substances, are of this class.

6°. *Blennorrhagia, à stimulo mechanico*, which is the effect of a violent effort in coition, and sometimes of masturbation.

7°. The *hemorrhoidal blennorrhagia*. The hemorrhoidal vessels being swelled often irritate the urethra, the bladder, the vagina, or the uterus, and *vice versâ*, by sympathy; or they even open into the cavity of the bladder, or the canal of the urethra. In either case, they often cause a discharge of puriform matter. It even seems that sometimes the little worms called *ascarides*, from the irritation they occasion in the rectum, may cause a sympathetic discharge or blennorrhagia of the genitals.

The *blennorrhagia of children*, which sometimes attends dentition, (*Blennorrhagia dentitionis*,) is also sympathetic.

Besides the causes cited, there are perhaps several still unknown which sometimes produce blennorrhagias. I know that the gum resin of the *guaiacum officinale* taken internally, has produced in some men a discharge from the urethra, perfectly similar to a blennorrhagia. I have been assured that the use of pepper in hot climates sometimes produces the same effect. By washing the parts with water impregnated with common soap, and still more by injecting this solution

after coition, a discharge will sometimes come on with heat of urine, which patients and superficial practitioners improperly take to be what is called a virulent gonorrhœa. I have seen a blennorrhagia of the glans produced by the imprudent application of the phagedenic water, and I have several times seen blennorrhagias brought on in women by injections with this remedy.

All these blennorrhagias that I have mentioned must be carefully distinguished in practice not only from each other, but also from the following complaints :

1°. From a *blennorrhœa*, or discharge from the genitals, not attended with inflammatory symptoms, and which is commonly called a benign or habitual gonorrhœa or *gleet*. This complaint is distinguished from a blennorrhagia, 1°. In being without pain, or heat of urine. 2°. The matter of blennorrhœas is more viscous, and draws out in threads between the fingers, leaves stains on the linen which are easily effaced by rubbing, while the matter of blennorrhagias does not draw out between the fingers, and leaves stains on linen that cannot be effaced by rubbing.

2°. A *gonorrhœa*, properly so called, (*Spermacrasia seu gonorrhœa proprie sic dicta*,) which consists in a diseased and habitual discharge of real semen, of the humour of the seminal vessels, or of the mucus of the prostate gland; often without erection, and without any agreeable

sensation. This discharge from the prostate has a peculiar and very characteristic nauseous smell, and arises most commonly from debility, in consequence of excessive masturbation. It commonly terminates in *tabes dorsalis*.

3°. A discharge really *purulent*, or only *puriform*, from the bladder or kidneys. In this case, there is never a discharge of matter but with or after an emission of urine, and particularly never during the night.

In women, besides the blennorrhagias they may have in common with men, we must distinguish those which proceed, 1°. From the ichorous or purulent discharge of a phagedenic or cancerous ulcer, or any other not syphilitic, in the uterus or vagina. 2°. From the discharge which many women have before and after their menses, and which often lasts so long, that it hardly ceases from one menstrual period to another. This complaint is often the effect of a local relaxation. 3°. From the discharge from the uterus or vagina generally known by the name of the whites, (*Blennorrhœa uterina habitualis, seu fluor albus benignus*), which is frequently a constitutional complaint, and in general the effect of high living and an idle and sedentary life.

It is principally because the distinction between syphilitic blennorrhagias, and those produced by other causes, has been forgotten or neglected, that we find so much difference of opinion respecting the method of cure. Some

recommend irritating or astringent injections, while others recommend oily and mucilaginous remedies. Some extol diuretic or balsamic medicines ; others prefer repeated purgatives. Some adopt mercurial remedies, while others pretend to be able to cure all blennorrhagias without mercury. In a word, it is for want of these distinctions that no sure and general method of treatment has ever yet been established. A thorough acquaintance with the distinctions here established, and a consideration of the very different qualities of the remedies proposed for the cure of blennorrhagias, will clearly show us why each of these remedies, applied in routine practice, succeed in certain cases, while they have no effect, or become hurtful and even dangerous in others.

The practitioner who neglects these essential distinctions, not only risks his reputation, but moreover often exposes himself to trouble the harmony of two innocent and happy persons. A husband who is suddenly attacked with a blennorrhagia, (or an ulcer in the genitals,) which the physician pronounces to be of a syphilitic nature, will not fail to accuse his wife ; and she, though defended by the consciousness of her innocence, will never be able to exculpate herself in the eyes of her husband. For all these reasons, I cannot sufficiently recommend, principally to young physicians and surgeons, never to pronounce too soon and too lightly on the nature of these diseases of the genitals of either sex, when consulted ; and always, I repeat it, to keep in view these necessary distinctions.

I readily grant that it is in general very difficult to determine to what species such or such blennorrhagia belongs: for characteristic signs to distinguish the different species are wanting; and however different their cause, they are almost all attended with the same symptoms. Nevertheless the short duration of the discharge in some cases, the slightness or mildness of the symptoms; the accessory circumstances, such as the health of the patient and his predisposition to certain diseases before he was attacked by the blennorrhagia, the state of health of the person from whom he suspects he got the complaint; the symptoms she has had since the disappearance of the discharge which often takes place without the use of any remedy; in fine, the physical and moral examination of the patients, and of the circumstances which preceded, accompany, and follow the disease, will enable the practitioner to form a safe opinion in most cases. Besides these considerations, I think, from the observations I have made, that we may consider as symptoms exclusively belonging to syphilitic blennorrhagia, the swelling of the testicles, the inflammation of the prostate, the retention of urine, and perhaps also the sympathetic tumour of the lymphatic glands of the groin, when these symptoms come on, without any other palpable cause during the course of a blennorrhagia.

The *prognostic* of blennorrhagia is favourable, when the symptoms of irritation and inflamma-

tion, such as heat of urine, frequent desire to make water, and pain during erection, are not very violent nor of long duration. The complaint diminishes when the discharge becomes less abundant, thicker and less yellow or white. The inflammation is known to be entirely removed when the cordee, heat of urine, and pain in erection, have entirely ceased; when the desire to make water is not more frequent than in the natural state; when the discharge which is diminished assumes a thicker consistence, so that the matter becomes gluey and threads between the fingers; finally, when the patient feels no longer any pain or titillation in the urethra.

It must be observed, however, that the colour of the matter discharged from the urethra or the vagina can never serve alone as a prognostic; and though the change to white from a sulphur colour, which the matter first had, be generally, as we have already said, a favourable symptom, nevertheless it is not a certain sign of the destruction of the virus, and should never make us think that the discharge is no longer contagious, as is generally imagined. On the contrary, I have observed, in many patients, that the matter retained the greenish-yellow colour long after the inflammatory symptoms were past, and sometimes till the end of the disease. At all events, we are persuaded that no practitioner by his advice, nor any patient of principle, would, on simple conjectures or probabilities of

matter being no longer contagious, run the risk of communicating the disease to a sound person, by coition at hazard. As long as there is the least discharge, the patient himself is exposed, by premature coition, not only to make his complaint worse or prolong his own illness, but often to communicate the disease, contrary to all apparent probability, to a person, whom he would regret during his whole life having infected by the imprudence of a moment.

The prognostic is very unfavourable when the symptoms of irritation are violent ; when the inflammation extends very far into the urethra ; when there are streaks of blood mixed with the matter of the discharge ; an ulcer in the urethra ; an evident tumour of a gland of the urethra ; a swelling of the testicles, or an affection of the prostate, or when the bladder itself is affected : especially if the patient is of a sanguine temperament, or a very irritable constitution. The inflammation indeed may be made to last as long as one likes, by allowing the patient to follow a bad regimen, or by prescribing a wrong treatment.

Of two men nearly of a similar temperament, attacked at the same time with a blennorrhagia, communicated to them by the same woman, he who lives in a regular manner will be cured in a few weeks, while the other who gives himself up to debauchery, drinking, or violent exercise, or exposes the diseased parts to frequent irritation, may keep the complaint for months and

years, and even run the risk by such conduct of getting the whole system infected.

It has been asked how long the discharge retains the power of communicating infection.

The solution of this problem is of the greatest importance. The happiness of a family may depend upon it. It is therefore very essential that the physician should not pronounce at hazard on the nature of the discharge, especially when there are no characteristic marks which enable him to distinguish *à priori* syphilitic blennorrhagias, either from the herpetic or the leprous virus, or from the gout or some other acrimony. For a discharge proceeding from these last causes may also sometimes be contagious, though the infection it communicates be different from that which proceeds from the syphilitic virus.

In general, women accused of having infected a man with the latter disease deny it strongly; they are also often ignorant that they have it themselves; they receive the germ of infection without knowing it, and the virus, though lodged in some part of the vagina, has not yet discovered itself by any symptom.

A physician, to act properly on these occasions, should declare that every discharge from the urethra or vagina, especially when accompanied with inflammatory symptoms, may be communicated by coition, that is to say, may produce in a sound person an irritation followed by a discharge, or even an ulceration, and that this

ulceration lasts as long as there remains the least appearance of discharge ; for, though there may be absolutely a period when such a discharge ceases to be contagious, yet as there is no certain criterion to know when that moment arrives, it is always more prudent for the physician not to rely on probabilities, but to declare frankly that connection is always dangerous, while the least discharge remains, though the inflammatory symptoms have long since gone off. I have seen more than one example of the propagation of diseases in similar circumstances.

After having stated all the considerations which I had to make on the nature and different species of blennorrhagias, I proceed to the method of cure.

METHOD OF CURE.

All syphilitic diseases when left to themselves grow worse, and destroy the constitution. The syphilitic blennorrhagia alone may cease, and does in fact sometimes cease naturally and without the help of art, provided that, during its continuance, the patient leads a sober and regular life. For, as we have already observed, not only the abundant and continual secretion, excited by the stimulus of the syphilitic virus, prevents its action on the surrounding parts, but the discharge also carries off the virus by degrees. This is perhaps even what happens in all simple

syphilitic blennorrhagias, as well as in those which owe their origin to any irritating matter whatever, communicated by external application; but this is far from being always the case in the syphilitic blennorrhagia. The irritability of the urethra, the constitution of the patient, the faults he commits in his regimen, in exercise, or the choice of his remedies, and perhaps the nature of the virus itself, which is more or less acrid, and the action of which is more or less violent, often render this species of blennorrhagia a very violent disease; or else it is complicated with an ulcer, and thus becomes the source of a multitude of complaints which often last as long as life.

It is therefore more advisable to have recourse to remedies suitable to the nature, the violence, and progress of the syphilitic blennorrhagia. Experience confirms in fact, that the sooner proper means are applied, the sooner the patient is cured, suffers less, and more certainly avoids those dangerous or fatal accidents which are so often seen to be the consequence of this disease.

From this consideration, it is not doubtful, that it would be very advantageous either to prevent the disease entirely, or to destroy it in its source. Two means have been proposed for this, by one of which the virus would be carried off before it could act on the parts exposed to the contagious contact; the other would destroy or alter its nature and prevent its effects, from the moment that it gives the first signs of its action, after it has fixed on the sound part.

According to these views, several practitioners, especially in England, have tried and recommended different prophylactic remedies. Some have preferred the mercurial ointment, applied on the whole surface of the glans and prepuce before coition. Others have extolled different lotions and injections after coition, composed of caustic alkali or lime-water, of alcohol diluted with water, mercury, cold water, vegetable astringents, metallic salts: these injections have been advised seven or eight times a day, for several days, from the beginning of a discharge of this nature. Other practitioners have recommended with the same intention, the topical application of mercurial ointment, or the submuriate of mercury; others, the infusion of linseed with the acetate of lead, or a solution of the acetate of lead with opium, or a solution of muriate of ammonia and opium mixed with water; others in fine, a solution of the oxide of copper in ammonia or sulphate of copper, dissolved in a great quantity of water. All these remedies have been proposed and recommended either to change or destroy the syphilitic virus in its source, or to oppose its action, either by diminishing or altering the irritability of the membrane of the urethra.

If by means of these injections, the irritation is appeased, or the progress of the inflammation stopped, and the discharge becomes thicker during their continuation, the complaint may be

easily removed, by taking care to prolong the use of them six or ten days after the discharge has disappeared ; for if they are left off too soon, the discharge and inflammation increase. In this case, it is necessary to make the injections stronger, and to repeat them oftener.

From these observations, it appears to me, that these injections sometimes succeed, not merely by opposing the action of the syphilitic virus as is generally believed ; but probably also by changing or destroying at the same time the nature of the virus itself.

It is in England, from 1770 to 1810, that mineral or vegetable astringent injections have been chiefly recommended and practised in blennorrhagias of the genitals. From the beginning of this practice, I was always apprehensive it might give rise to serious accidents, and produce diseases more dangerous than even that which it was meant to cure.

The result of my observations has confirmed my fears ; strictures in the canal of the urethra, fistulæ, and retentions of urine, have become in the different parts of Europe, where that practice has been adopted, much more frequent complaints than before that epoch. Consequently, I advise, from my intimate conviction of their bad effects, that they should never be used in discharges attended with inflammation.

When the blennorrhagia is once completely established, modern authors have recommended

very different methods and remedies. Some advise the use of mucilaginous or oily medicines, others sedatives; some purgatives more or less strong, and repeated every three or four days; others, in fine, divers diuretics, balsamics, stimulant, sedative, astringent injections, &c. Each pretends to have observed the good effects of his favourite method. In fine, we have lately seen J. Hunter begin by crying down all these different remedies and methods as insufficient or bad, and afterwards, like a true empiric, recommend them, and advise them to be used successively one after the other in obstinate cases.

On entering on the practice of physic, I was sorry to see this confusion. I saw that it was partly from not having well determined the nature of the disease; partly from not distinguishing exactly the constitution of the patient, that many of these so highly recommended remedies, produced alternately good or bad effects. I saw that this confusion was principally owing to the disposition, which unfortunately is too common among practitioners, to draw general conclusions or inductions from some particular facts, which are often themselves but imperfectly ascertained.

I therefore took the only part which remained for me in this case, as in any similar one; I laid aside for a time all I had ever read or heard of this disease. I began to examine the nature, and follow the course of the disorder as if they had never been known nor examined by any person.

I found as the result of my labour and my observations (and I cannot repeat it too often), that the proximate cause of every blennorrhagia is a local inflammation excited by a virus, an acrid matter, or any stimulus applied to the mucous membrane of the genital parts, and that the indications which naturally require to be fulfilled in all species of blennorrhagia are the same, that is :

1°. To change or destroy, if possible, the nature of the virus, or the quality of its acrimony, and consequently to prevent its bad effects :

2°. To carry off the acrid matter :

3°. To defend the sensible and irritable parts against this acrid matter, and against the irritation which it causes :

4°. To moderate the irritation and the symptoms of inflammation when they take place.

To fulfil the first indication, the most sure and efficacious means is the injection recommended by Dr. George Fordyce, author of the excellent treatise on fevers, to whom we owe several other useful observations in medicine (*Vide Ph. syph. injectio ad blennorrhagiam syphiliticam*). This injection may be used with advantage immediately after coition, or the moment the first symptoms of blennorrhagia are perceived ; it is then applied five or six times a day, or every time after making water, and is thus continued for some days, and afterwards only three or four times a day. The external parts are washed two

or three times a day with the same liquor ; by this means, the source of the complaint is often removed, and the disease does not take place ; or if it appears, it is generally cured in a few days ; or at least the irritation and inflammation disappear, and the discharge acquires the character of a simple blennorrhœa, which is easily cured and without danger by the means indicated in the next chapter.

As to the second indication, nature provides for it sufficiently by the abundant discharge, and leaves little to do for the physician, whose principal duty is to let her act or assist her, and to prevent her salutary operations from being disturbed by contrary remedies or conduct. Repose, abstinence from acrid things, from spices and pure wine, from coition, and from violent exercise, with the use of diluting drinks, contribute powerfully, especially when the patient avoids at the same time whatever may irritate the parts or occasion a suppression of the discharge ; such are purgative medicines, a heating diet, exercise, local irritation, &c. I shall return to this subject again.

For the third and fourth indication, authors have recommended, in all times, mucilaginous, oily, and sedative medicines. The violent irritation of the urethra in a blennorrhagia, so different from a catarrh or blennorrhagias of other parts of the body, is not, as has been improperly supposed, owing to the particular structure of that

organ, which has been supposed more irritable than the mucous membrane of the nose and other parts of the body ; but arises from the salts which the urine conveys out of the body, and which, in passing through the urethra, must necessarily increase, or at least maintain the irritation produced by the virus. The salts which contribute the most to this irritation are the phosphates of soda and lime, and especially the free phosphoric acid, which is always in the human urine in a very considerable quantity. It has been proposed, in order to moderate the irritation of the urethra, to give the patient internally a solution of gum arabic, or an infusion of linseed, decoction of mallows, &c. This method appears reasonable and suitable to the nature of the disease, but I have generally observed, that these mucilaginous drinks, to produce any marked effect on the urethra, must be taken abundantly, and that then they almost always deranged and incommoded the stomach considerably. Though I have tried to remedy this inconvenience by varying or mixing these medicines, I have not been satisfied with my success ; milk of almonds, orgeat, and the decoction of pearl barley, are less subject to inconvenience ; but what succeeds better still perhaps, is the infusion of hemp seed. I have found that the infusion of these seeds perfectly fulfilled the third, and partly the fourth indication, without any of the disadvantages which followed the use of the other mucilages.

This medicine may be rendered more agreeable by adding either a little sugar, or syrup of raspberries or currants; in other cases, lemonade may be used with advantage, or else, according to circumstances, a slight decoction of sarsaparilla. All these drinks should be taken cold, or at most lukewarm, and often, but in small doses each time; all drink taken very hot is hurtful.

As to what regards more particularly the fourth indication, to moderate the irritation and inflammation of the urethra, it is necessary, above all, to avoid carefully whatever might contribute to increase the symptoms, to pay attention to the constitution of the patient, and to distinguish the nature and causes of the disease. It is necessary to be thoroughly convinced, that these inflammations of the mucous membrane of the canal of the urethra or of the vagina are, for the most part, of the species which Hippocrates calls *Epiphlogismata*, and which the moderns have called erysipelatous or erythematous (*Erythema*); that in general they are but little subject to form suppurations or ulcers, which are so frequent in the inflammations of the cellular membrane, or of the glands (*Phlegmon*).

They participate however, in many cases, of this latter character, according to the temperament of the patient, his age and regimen. The robust and sanguine temperament, violent exercises, the use of spirituous liquors, &c. are apt to increase the inflammation of the mucous

membrane, to extend it to the cellular membrane, and to render it phlegmonous. In delicate patients, and who follow a suitable regimen, it will remain entirely confined to the mucous membrane.

To give relief in this complaint, or to cure it in the speediest manner, the practitioner must act according to these observations, and never lose sight of them during the whole duration of the disorder. His success, and consequently his reputation, and the happiness of his patients, depend upon it. If he neglects these rules his practice has no longer any solid basis; it becomes vague, wavering, and empirical.

The inflammatory symptoms are not always owing solely, as I have said above, to the virus or acrimony which has its seat in the urethra, but partly to the urine itself, which passes over the irritated parts, and to the diet and bad regimen of the patient; and often also to improper remedies or those improperly administered; thus balsams or resins, salts, heating medicines, a heating or flatulent diet, pepper, mustard, beer, especially if it is not sufficiently fermented, new sweet wines, brandy, spirituous liquors, vanille chocolate, coffee; but above all frequent touching of the affected parts, lascivious ideas, and still more, coition, or masturbation complete or incomplete: such are the principal causes, which together or separately increase or support the inflammation of the urethra.

Those who pretend that the blennorrhagias of the genitals all proceed originally from the same cause, and consequently should all be treated in the same manner, and who order all their patients the same regimen and the same remedies, show that their practical knowledge is very confined, or that, led by vile interest, they only wish to gain money with the least possible trouble, while an enlightened and honest physican will always make it a duty not only to cure the patient, but also in the safest, easiest, and speediest manner. Do we not see, that it is useful even to persons in perfect health, to observe different rules of conduct in different seasons and climates? How much more so then, must it be for a patient, whose irritability is commonly much augmented by a foreign morbid matter, and whose body is much more exposed to be affected by the least injury from external and internal objects! Do we not see every day diseases take a very different character in different persons, or in the same person at different periods; and the same remedy, that had been useful to one patient, become hurtful to another with the same disease, or to the same person in a different degree of the disease, in another climate or another season? Many of my readers will think perhaps, that it was useless to insist so long on this subject; but we see so many of those routine practitioners, so many patients victims of this empiricism, that I shall find myself obliged to return to it again in several chapters of this work.

The regimen, which patients must observe in all blennorrhagias, consists in general in avoiding, as much as possible, whatever may contribute to increase irritation and inflammation, as we have remarked above: especially violent exercise on foot or horseback, external cold, high-seasoned food, the use of spirituous liquors, purgatives, diuretic medicines or aliments, &c., astringent or irritating injections, and every other species of local irritation. These rules especially concern those of a sanguine temperament, because they commonly suffer much more, and longer, from this complaint than others. Such patients should confine themselves to a light diet, rather vegetable than animal, avoid suppers, hot beds, and drink only refreshing and mucilaginous drinks, while those of a different constitution need not restrain themselves so much.

In all cases, I advise the patient, from the beginning of the blennorrhagia of the urethra, to wear a suspensory, and to continue to make use of it during the whole course of the disease, that is to say, till the inflammatory symptoms have completely disappeared. Though this precaution may appear superfluous, it is so little inconvenient when the suspensory is well made, and I have found it so useful in preventing an affection of the testicles, that I never neglect recommending it, especially to those who have been already attacked with this last complaint. As to

persons whose profession requires exercise, the best way to prevent any bad consequences from it, especially in cold climates, such as paraphimosis, swelling of the testicles, the affection of the prostate, or the neck of the bladder, the retention of urine, &c., is to wear, at the same time, round the penis, a proper bandage or piece of linen, so that it may be defended from the external injuries of cold, and from the friction occasioned by walking. This linen or sort of bag should be kept constantly clean, by frequently renewing the lint which is put into the cavity of it, to imbibe the matter as fast as it discharges from the urethra.

Another general precaution which it is proper to make patients observe is, never to keep the penis tied upwards during a blennorrhagia, but always to keep it well down, in order that the matter may always flow out freely, and never be obliged to run back along the urethra.

As to patients who have the glans naturally covered with a strait prepuce, it is proper to introduce into those parts, two or three times a day, from the beginning of the complaint, a small quantity of mercurial ointment. I have seen very good effects from it in preventing chancre, phimosis, and paraphimosis: these observations induce me to recommend this method to the serious consideration of practitioners.

Several writers have recommended the neutral salts to excite the secretion of urine. They ex-

pected by this means to appease the inflammation, and help nature to expel the virus. But I have always found these medicines prejudicial; for these salts, as well as some other diuretic medicines, increase indeed the secretion of urine, but not that of the mucus of the urinary passages; on the contrary, by giving it a more saline and acrid quality, they increase the irritation of the urethra without producing any of the good effects attributed to them. Lemonade or orangeade, parsley water, the decoction of saponaria, and, according to circumstances, the powder described in the *Phar. syph.* by the title *pulvis nitroso-camphoratus*, are the only diuretics that I have found useful.

Another prejudice, that of purges in blennorrhagias, was long preserved. Some employed the purgatives called mild or laxative, others the most drastic purgatives: the muriate of mercury has been particularly recommended every two or three days. I never saw either of these medicines do any good, but often much harm. These medicines, besides their tendency to facilitate the absorption of the virus into the system, often give rise to a swelling of the testicles, diseases of the prostate gland, retention of urine, &c. But though purgatives should not be given, it is proper to keep the bowels open, so that the patient may go to stool regularly every day, or at least every other day: which may be effected by the use of stewed

prunes for supper, or by a simple glyster; or castor-oil taken internally, or laxative pills. Indeed, I have no doubt that it is in consequence of these useful changes lately adopted in practice, that we at present so rarely see those unfortunate accidents which were formerly observed after blennorrhagias, if we may judge from the accounts of several authors.

I have never recourse to injections, as long as the common inflammatory state of the disease continues.

So much for the ordinary progress of blennorrhagia. In cases where the symptoms of irritation or inflammation are more violent, we must have recourse to other means.

If the symptoms of a real inflammation are considerable, if the pulse is hard and quick, &c., bleeding is useful and even sometimes necessary; but commonly better effects are obtained by a local evacuation of blood, which is done by applying leeches either to the penis, or, according to circumstances, to the perinæum, or, for want of leeches, by scarifying the parts. The constant application of fomentations, or emollient and sedative warm cataplasms, are equally proper. But they must be changed as soon as they begin to cool; for it is certain that when cold they do more harm than good; and it is therefore proper to add a little oil or unsalted hog's-lard to them, which helps to maintain longer the mild heat and moisture

of the cataplasm. Nevertheless, in general, they should not be continued above a few days, for fear of their relaxing too much, and thus tending to prolong the disease. Rest and abstinence from animal food and spirituous liquors are, in serious cases, absolutely necessary. The patient's only drink should be an infusion of hemp seed, or some emulsion, he should have a mucilaginous or oily glyster every day, and in these cases, sometimes remarkable benefit is found from a powder composed of gum arabic, nitre, and camphor, as mentioned above, which is given three or four times a day.

This powder however produces different effects according to the difference of constitution, sex, &c. There are persons who bear it easily during the whole course of the inflammation; there are others, and principally women, of an irritable temperament, who can neither support the nitre or camphor which enter into the composition of this powder, and I have seen patients who, after having taken this powder for some time, felt an extraordinary heat of the body, a disagreeable affection of the stomach, a colic or diarrhœa, a head-ach, and general uneasiness. In all these cases, we must observe with respect to these powders, the same rule that the attentive and enlightened physician observes in all diseases with respect to any other medicine. As soon as they produce any bad effects, he gives them up entirely, or at least for some days, never

obstinately insisting on the continuation of a remedy which does no good.

A practitioner of my acquaintance in London, used to cure his patients affected with blennorrhagia generally in eighteen or twenty days. He gave them no drink but milk for the first six days; the six following days he gave them lime-water pure, or mixed with milk with a grain of opium every night; in fine, the six or eight last days he gave them simple lime-water.

In Hindostan, the Hindoo physicians make use of a plant, in blennorrhagia, called in Sanscrit *Muchucunda* (*Pterospermum saberifolia*). They take a single flower of the fresh plant, and let it infuse for a night in a cup of water; which forms in the morning a refreshing mucilage, excellent in the blennorrhagia. It is to be regretted that this remedy is not yet introduced into Europe; and the more so as it is said that the same flowers dried, and taken in fine powder, like snuff, remove nervous headaches in an instant.

Camphor alone, taken internally with sugar, in an emulsion or in a fresh egg, is sometimes an efficacious remedy in calming the pain and heat of urine. The external or internal use of camphor has also been recommended to prevent frequent erections in blennorrhagia.

The mucilaginous or oily medicines, &c. are continued, as well as the general antiphlogistic regimen, till the pain and other symptoms of

irritation in the urethra are entirely, or nearly, removed. The use of them is then diminished or given up, and at the same time the patient is allowed a less severe diet, for fear of disposing the urethra to a gleet or chronic blennorrhœa.

The late Dr. *G. Fordyce* has observed, that blennorrhagia in general is often very much relieved by bark given in powder, an ounce a day.

Some practitioners make use, in blennorrhagias of the urethra, of injections made with the white oxide of zinc dissolved in vinegar, by mixing twenty drops of this solution with four ounces of distilled water. They pretend that this remedy, more than any other, diminishes immediately all the inflammatory symptoms, as heat of urine, cordee, &c., but that it also destroys all venereal power, and prevents erections for a long time: this fact requires confirmation.

Dr. *Al. Hamilton*, one of the most distinguished physicians of Edinburgh, recommends, in the inflammatory state of this disease, injections made with the aqueous extract of opium and the acetate of lead dissolved in water, frequently applied from the beginning of the complaint, and says, he observed that this remedy greatly contributed to relieve the patient, and to abridge the disorder. Notwithstanding, the mildest injections, even those of lukewarm oil, sometimes prove hurtful from the peculiar irritability of the urethra, or else because few pati-

ents know how to manage them properly. If it be judged proper to use them, it should be done with the greatest precaution, without producing too great a distension of the urethra ; otherwise more harm than good is done by the irritation which is occasioned. In very serious cases, great benefit has been derived from frictions with mercurial ointment on the whole length of the urethra to the perinæum, and on the inner surface of the thighs; in other cases, the same benefit is found from mercurial fumigations applied to the genitals, and even from the injection of lukewarm mercurial ointment into the canal of the urethra.

On the other hand, when the symptoms of irritation or inflammation are very alarming, and especially when the patient is of a very irritable constitution ; if he feels better after dinner ; if the discharge be very thin and abundant, and is attended with an acute pain, often shooting through the whole body of the urethra ; and if the pulse is weak and quick, I have found it better to allow the patient a freer diet, with a moderate use of wine, and in some cases bark. I have used it in serious cases with success, giving the patient at the same time half a grain or a grain of opium every night, or else a glyster with a little opium and oil. This plan often does better than all the antiphlogistics put together. One is surprised sometimes with the sudden changes for the better, produced by these remedies. The use of opium, moreover, greatly

contributes to prevent painful erections. But, in all cases, their return must be avoided as much as possible, by tying down the penis at night, not up as has been improperly advised, and by making the patient lie on the side, and on a mattress, and not on his back, or on a feather-bed.

If during an erection the prepuce is drawn behind the glans, and produces, as sometimes happens, a strangulation of the glans, recourse must be had without loss of time to the treatment indicated in the *chapter* on Paraphimosis.

If, during violent and painful erections, a hemorrhage comes on, as pretty frequently happens, we need not be alarmed; most commonly it stops of itself, and relieves the patient. In case it should last longer, and threaten exhaustion, balsam of copaiba must be given internally, and a stoppage attempted by pressing the urethra behind the spot from which the blood flows; and if this does not succeed an astringent injection may be used, and in more alarming cases, even oil of turpentine should be thrown up.

If the inflammation of the urethra is violent and attended with *cordée*, we must have recourse to leeches, and frictions with mercurial ointment, by mixing and triturating an ounce of that ointment with two drachms or half an ounce of camphor applied to the urethra, or vapour baths with camphor applied to the penis, or cataplasms made with hemlock powder and camphor; at the same time, the extract of hemlock is given

with camphor every night. Sometimes bark relieves these pains better than any other remedy. If there remains any pain in erection after the blennorrhagia is cured, mercurial frictions are employed with advantage; also electricity, sometimes leeches, and the extract of hemlock internally.

If, in consequence of the violence of the inflammation, the discharge stops, and the posterior parts of the urethra begin to be affected, a warm bath of the whole body must be taken; or a local vapour bath, by placing the patient on a close-stool, in which is a vase with boiling water, which must be repeated three or four times a day, taking care, during the time, to keep the scrotum suspended. The patient must keep his bed, and an emollient and sedative cataplasm be applied on the penis, and renewed every hour. These means, to which a sedative glyster is added at night, are the best I know for re-establishing the discharge. In other cases, I have found the application of a common bougie for half an hour or an hour produce prompt and admirable effects in restoring the discharge.

Injections have also been recommended; but they are evidently hurtful in this state, and increase the irritation. The same treatment, indicated above, is also proper when the discharge is stopped or suppressed, during the period of the inflammation, by acrid or astringent injections, or even by oily or mucilaginous injections, badly applied; or by drastic purgatives, or mild

ones repeated; by the internal and premature use of turpentine or the balsams; by violent exercise; and above all by cold that may have reached the part affected. If any gland of the canal happens to be obstructed and inflamed, emollient cataplasms and the application of mercurial ointment are useful. It is in these cases particularly, where the blennorrhagia has been stopped by any cause whatever, that syphilitic symptoms often appear in the throat or other parts of the body.

When the prostate gland or the neck of the bladder are affected, and the patient is of a vigorous and plethoric habit, it is often necessary to bleed copiously, or to apply leeches to the perinæum. In all these cases, a sedative glyster repeated every seven or eight hours, and a general or local warm bath renewed twice a day, are the best means to be employed. But very often the simple application of a medicated bougie produces relief, and a prompt and salutary effect.

Swellings of one or several inguinal glands that appear during a blennorrhagia are commonly sympathetic, that is to say, merely owing to the irritation of the urethra, without any virus being absorbed and fixed in the gland itself, and they then disappear with the blennorrhagia. There are cases, however, when an absorption of the virus takes place; and then the virus transported into the inguinal glands produces an

inflammation in them, which must be treated in the manner indicated in chap. xiii.

The syphilitic blennorrhagia of the glans (Blennorrhagia balani), or the discharge of puriform matter from that part, has its seat principally in the mucous glands round the crown of the glans. It is almost always easily cured by applying mercurial ointment, and by frequently washing and bathing the sore part with lukewarm milk, or, according to circumstances, with lime-water or a slight solution of the acetate of lead. In cases where the prepuce is so much swelled that it cannot be drawn back, and the application of lotions becomes impossible, recourse must be had to sedative injections, and mercurial ointment introduced between the glans and the prepuce; which especially becomes still more necessary, when there are hidden chancres. If these do not yield soon to the ointment, the injections, or lint well moistened with the phagedenic water (*lotio syph. lutea*, Ph. Syph.), an incision of the prepuce must be made to prevent the ravages of the syphilitic virus, and to have a better opportunity of applying suitable remedies. See chap. viii.

A general rule, to be carefully followed in all blennorrhagias, is to press or touch the affected parts as little and as seldom as possible, as that keeps up the irritation and inflammation; and, whenever they have been touched, to wash the hands immediately after, and with the greatest

care, for fear of inoculating oneself elsewhere with the disease; by touching the eyes, nose, &c.

In ordinary blennorrhagias of which the symptoms are moderate, the internal or external use of mercury is useless; but in all syphilitic blennorrhagias, attended with violent and obstinate symptoms, it is prudent to give mercury for twelve or fifteen days in the course of the disorder or towards the end, in order to prevent a general infection. This precaution becomes indispensable, and should never be neglected, if the matter is tinged with blood, or if there has been a hemorrhage, and principally when there are evident symptoms of an ulceration; for in such circumstances, there is great danger that the syphilitic virus may have been absorbed and carried into the mass of blood.—If the blennorrhagia proceeds from an old syphilitic complaint, a complete mercurial treatment becomes indispensable.

Blennorrhagias caused by a chemical stimulus, or other acrimonies applied to the urethra, as well as those which come from any preparation whatever made with cantharides (*Lytta vesicatoria*), or acrid diuretics, drastic purgatives, the use of some sorts of beer, &c. mostly disappear without the help of art, or are relieved by mucilaginous and oily substances. Those which owe their origin to some internal disease, as the gout, the herpetic virus, the leprous, scorbutic acrimony, &c. require, as diseases merely symptomatic, internal remedies appropriated to the nature of

their primitive cause or original disorder. Those produced by the swelling or irritation of the hemorrhoidal vessels, which discharge a serous or mucous fluid by the bladder or urethra, commonly disappear in a very little time, if the principal disease be carefully treated. Sometimes sedative glysters or injections are very useful; but it is only a decoction of poppy heads or a solution of the aqueous extract of opium that must be used, the resinous part of the opium being very subject to irritate and aggravate the disorder of the canal of the urethra.

Before concluding this chapter, I must mention a dreadful and criminal prejudice, which is held by many young men when attacked with a syphilitic blennorrhagia; which is that they think they can get rid of it by lying with a sound person, or, what is still more culpable, with an innocent girl. The Africans, it is said, expect the same benefit from a she-ass. To what a degree is man degraded by ignorance and superstition!

The consequences of this brutality are terrible to both. The woman is infected, and the man has an increase of all the symptoms of inflammation in the urethra, very often a violent hemorrhage, an ulcer in the urethra, the propagation of the inflammation of the mucous membrane to the cellular membrane of the urethra, as far as the prostate or neck of the bladder, and sometimes the absorption of the virus into the mass of the

blood, and finally, often a very obstinate blennorrhœa.

There is moreover an almost general opinion among many practitioners, especially in France, that a blennorrhagia, or what is called a virulent gonorrhœa, cannot be cured without a mercurial course. The young practitioner, who has once attained a correct and precise idea of the nature and seat of this disease, seeing on one hand, that there are very few blennorrhagias attended with an ulcer, and on the other, that every mercurial course, instead of contributing to render the cure of a simple blennorrhagia more sure or speedy, tends on the contrary to weaken the patient, and frequently exposes him to very troublesome consequences, will certainly abstain from a remedy, which should never be employed in any case without an evident necessity.

Blennorrhagias accompanied with ulcers on the prepuce or glans, with phimosis, paraphimosis, gangrene of the penis, swelling of the testicles, partial or total retention of urine, inflammation of the prostate, or an affection of the glands of the urethra or groin, with ophthalmia, &c. require a particular treatment, which will be found detailed in the following chapters.

Symptoms really syphilitic, or herpetic eruptions that appear in the system after blennorrhagias, especially after those that have been attended with ulcers or hemorrhages, or which have been badly treated, require a general anti-syphilitic or antiherpetic treatment.

SECTION II.

Of the Blennorrhagia of Women in particular.

Blennorrhagias in women are seldom attended with such violent symptoms, and never with such serious and dangerous consequences as in men. In some cases even, the symptoms are so slight, that they consider the discharge merely as the whites, to which besides many of them are subject, especially in the great towns in Europe.

The syphilitic blennorrhagia of women, also commonly called virulent or malignant gonorrhœa, or *fluor albus malignus*, is characterised by its seat not being in the cavity of the urethra, though some authors, and even lately B. Bell, in his *Treatise on Gonorrhœa*, have asserted that it is. He pretends that the seat of blennorrhagia, or virulent gonorrhœa in women, is always, as in men, in the urethra; but the slightest anatomical knowledge of the parts which come in contact in coition, and even common sense alone, might easily convince one of the falsity of this assertion. The cavity of the urethra in women has no relation with coition; it is situated out of the sphere of activity of the virus; and if the urethra seems to suffer in women during a gonorrhœa, it is, that the orifice of that canal which opens in the vagina is sometimes inflamed, together with the neighbouring mucous mem-

brane of the vagina; but this affection is most commonly the effect of the sympathy of the neighbouring parts, which are very sensible, and affected exactly as in a man, who sometimes suffers violent pains in the glans when he has a stone in the bladder, or who has a very painful dysuria, when he is attacked with a chancre on the glans or prepuce; but, setting aside these reasons, if any practitioner had any doubt of it, he need only examine his patients with a little attention, to be soon convinced of the falsity of the opinion, which, without any reason, fixes the seat of this disease in women, in the canal of the urethra.* In fact, it would be very strange if the syphilitic virus, communicated by coition, should fix its seat by preference in the urethra of women. I have therefore observed in all cases, that the seat of the disorder was either on the clitoris round the orifice of the urethra, or in the nymphæ, or higher up, in the cavity of the vagina, or else below, near the inferior commissura of the labia in the raphe. Authors have been led into this error, on the seat of blennorrhagia in the urethra of women, probably from the strangury, or difficulty and heat of urine, to which they are subject in this complaint as well as men. But this affection of the urethra, as well as those of the bladder, are in women

* I do not deny, and it is even easy to conceive, that the virus is sometimes applied to the orifice of the urethra, and that the inflammation afterwards extends to the canal itself; but this case is far from being constant or general.

entirely sympathetic ; we often observe the same affections of the urinary passages in men who have only ulcers on the prepuce or glans ; and another cause may be assigned, namely, that the acrid urine in passing out, irritates the inflamed orifice of the canal of the urethra, or by touching in the vulva the parts irritated and inflamed by the virus, thus gives the patient the sensation of burning or smarting, as if the pain was in the urethra itself.

In general, blennorrhagia is attended in women with a sort of titillation and itching round the orifice of the vagina, and particularly below on the raphe ; uneasiness when sitting ; a swelling of the labia, nymphæ, and clitoris ; heat and pain in making water, especially heat when the urine touches the inflamed parts ; a characteristic symptom by which the blennorrhagia of women is principally distinguished from the whites. In more serious cases, the discharge of puriform matter, which is of a greenish-yellow and very abundant, is attended with heavy pains in the bladder, the womb, the groin, the back, and the loins.

Nevertheless, the inflammation and pain are sometimes carried to a much higher degree. The nymphæ, the clitoris, and the labia, become more swelled ; and these parts, as well as the raphe, the perinæum, and sometimes the skin of the thighs, are subject to be excoriated by the matter which touches them. This occasions an excessive itching ; a dysuria and burning heat

during the excretion of the urine, and a considerable uneasiness in walking and sitting. In some cases even, the inflammatory symptoms increase to such a degree, that they produce a symptomatic fever, flatulencies, vomitings, such a tension and painful sensation in the whole region of the pubes and abdomen, that the patient cannot suffer the least pressure on those parts. The inguinal glands swell at the same time and become very painful; and we then often find, on examining the affected parts, that not only the mucous membrane is inflamed, but that there is at the same time a real inflammation of the cellular membrane often attended with syphilitic ulcers. These ulcers are sometimes so small, or situated so far up in the vagina, that it is difficult to discover them, unless the parts are examined with extraordinary care.

The violence of these symptoms much depends in general on the constitution of the patient, the peculiar irritability of the affected parts, bad treatment, or negligence of the patient, and perhaps also from the greater or less acrimony of the matter which is the cause of the disorder.

The symptoms and consequences of syphilitic blennorrhagia in women differ greatly from those of men. We find the reason of it in the seat of the disorder, which, as we have just observed, is very different from that in men, and in the structure of their genital parts. Hence it happens that the consequences of a suppression

of the discharge are neither so common nor so dangerous with them as in men. The retention of urine, the tumour of the prostate, the strictures or other obstacles of the urethra, symptoms so dangerous in men, never take place in women; but they are subject, though less often than men, to that terrible ophthalmia which sometimes proceeds from a suppression of syphilitic blennorrhagia.

On the other hand, women attacked with a syphilitic blennorrhagia are more subject to excoriations and bubos: they are also more subject in this state to the syphilis itself, on account of the great absorbing surface exposed to the contact of the virulent matter.

With respect to treatment, we have the same indications to follow in the syphilitic blennorrhagia of women as in men, with this difference, that considering the difference of structure of the parts, as well as of the seat of the complaint, we may safely employ topical remedies from the beginning of the disorder.

We have nothing to fear from those distressing accidents so common in men; the application of the remedies on the parts affected and the cure are much easier.

Simple mercurial ointment may be used with great advantage in this disease, or else an ointment made with the submuriate of mercury and hog's-lard, in which may be incorporated a little aqueous extract of opium: about as much as the size of a nut is introduced into the vagina

once or twice a day, advising the patient to wear a bandage to prevent the linen being soiled. Lime-water also may be used, or a solution of a small quantity of oxymuriate of mercury in distilled water; or else, according to circumstances, acetate of lead with the aqueous extract of opium, applied in the form of injections or lotions, by means of a sponge or a proper syringe, several times a day.

If the symptoms are more violent, soothing injections, mucilaginous or oily, may be used; but in some of these cases, more relief has been found from a very weak solution of the oxymuriate of mercury in distilled water, or the phagedenic water, or lime-water, mixed with a small quantity of spirits of wine, injected six or eight times a day. In general, in all the blennorrhagias of women, when there is a great degree of irritation, the local application of opium is the most efficacious remedy for relieving and abridging this disease: but circumspection is necessary in the use of it. I saw a young woman suffer the most violent pain and irritation, which made her faint, after having injected a portion of a solution of opium in water which remained at the bottom of the bottle. The same happened to a young man, who employed the remains of a bottle of a similar solution in a glyster. It appears that what remained of the solution at the bottom of the bottles was much more charged with opium, or chiefly contained the resinous part of that substance.

When the matter is so acrid that it threatens, or really produces, excoriations in the neighbouring parts, principally in the raphe, and sometimes even on the thighs, the parts must be guarded by applying the common cerate; or, what is perhaps preferable, the raphe and interior of the thighs must be rubbed early and with care, at least twice a day, with an ointment composed of an ounce of mutton fat and two ounces of sweet oil, melted together by a gentle heat.

In all cases, it is prudent in the practitioner never to declare a woman cured of a syphilitic blennorrhagia, without having applied mercury locally to obtain a radical cure, or without giving her mercury towards the end of the complaint, for a fortnight, to destroy the virus which may have been absorbed into the mass of blood during the disease.

I have seen frequent examples of ulcers in the throat, and other symptoms really syphilitic, coming on after syphilitic blennorrhagias, even simple apparently, for want of this precaution, or of the local application of mercury during the course of the disorder.

Before concluding this chapter, it is proper to remark that women are very subject to discharges attended with heat, pain, and tension in the uterus and vagina, especially during and after menstruation. These discharges frequently are of the herpetic or eruptive nature, sometimes leprous, at others gouty; they are often conta-

gious and are communicated by coition. The nature of these blennorrhagias is sometimes discovered by their being preceded by a morbid affection of the stomach, the liver, the skin, &c.*

Their treatment requires internal and external remedies, suited to the nature of the virus or specific acrimony, from which they derive their origin.

I have also observed that women affected with a scirrhus or ulcer of the womb sometimes have contagious discharges, which produce blennorrhagias or ulcers, though not syphilitic, in the genitals of a man who frequents them.

The other local discharges of women, belonging to the genus blennorrhœa, require the treatment indicated in the following chapter.

* Examples which daily offer themselves in practice prove that there are many women, healthy in appearance and exempt from all complaint in the genital parts, and without any symptom of syphilis, who nevertheless, especially at certain periods, give blennorrhagias or ulcers to the men who frequent them. The same thing happens with certain men. A friend of mine, at Paris, who has red hair, of a strong and sanguine temperament, and enjoys perfect health in every respect, except a slight herpetic eruption with itching on the anus, which he has had for many years, has given a blennorrhagia to several healthy women, without having himself the least symptom in his genital parts. This confirms what I have said elsewhere, that one cannot have too much prudence in practice, when called to give one's opinion, or to decide on a particular case, if it be really syphilitic (vénéréel) or not.

CHAPTER IV.

OF THE BLENNORRHŒA OF THE GENITALS.

BY the word blennorrhœa, which I have substituted for that of *habitual* or *benign gonorrhœa*, commonly adopted, I understand a morbid discharge of puriform matter, or a thin limpid mucus from the urethra in men, and from the orifice of the vagina in women, without any inflammatory symptom, that is to say, without pain and heat in making water.

This discharge is therefore distinguished, as I have already said in the preceding chapter, by the name of blennorrhœa (*muci-fluxus passivus*, that is to say, a discharge without phlogistic symptoms) from blennorrhagia (*muci-fluxus activus*, or discharge attended with phlogistic symptoms), as well as from the discharge of real seed, or gonorrhœa properly called.

Blennorrhœa is described in Latin authors by the vague and improper denominations of *gonorrhœa benigna, non virulenta, inveterata*; and in women by the name of whites; *leucorrhœa, seu fluor albus; fluor albus benignus*. That which comes after a syphilitic blennorrhagia in men, is generally called by English writers a *gleet*.

After a blennorrhagia has lasted some time in a man or woman, the inflammatory symptoms, as the heat, pain in erection, and ardour of urine, diminish by degrees, and finally disappear; and sometimes the discharge ceases at the same time after three, four, six or eight weeks. Such is at least the most simple and ordinary termination of the disease. But it oftener happens, especially when mucilaginous remedies have been continued too long, with too strict a diet, that the inflammatory symptoms diminish or disappear by degrees, leaving after them a discharge of a puriform matter, commonly less copious, or a thick and whitish matter. This matter ropes or threads between the fingers, and no longer stains linen so deeply, and the stains when dried even disappear by rubbing. At other times, the matter consists of a limpid thin mucosity. This discharge, left to nature, often continues with obstinacy for months, and even years, without any other bad symptom, except that in some cases it is so considerable that it sensibly weakens the constitution of the patient, and especially the faculty of propagation.

In other cases, the discharge, after having disappeared for some days, weeks, or even months, begins to re-appear, either after coition or violent exercise, or after excesses of the table. The same thing also often happens, if the patient who makes use of injections or internal medicines to cure the complaint, seeing that the dis-

charge has almost disappeared, begins to be less exact and regular, or even gives them up entirely. In all these cases, the discharge very often returns in great abundance, assumes a yellowish colour, and finally becomes very obstinate.

In fine, if after the blennorrhagia there remains either an ulcer in some part of the urethra, or an erosion of the orifices of the prostate gland or seminal vessels, the mucous discharge is mixed with real pus or purulent matter, and even sometimes becomes ichorous. It is a species of *pyorrhagia* of the urethra, which is always attended with more or less dysuria. In other cases, the sphincters of the orifices of the prostate gland are merely weakened, and the discharge is limpid, mucous, continual, and copious, attended with a very peculiar nauseous smell. Sometimes the discharge of this humour only or principally takes place when the patient goes to stool, and the hardened excrements, in passing through the rectum, press more strongly on the prostate gland. If the sphincters of the orifices of the seminal vessels are affected in this manner, the discharge is mixed with real seed; and it is then a gonorrhœa properly called. (*Spermacrasia Nosol. method. auct.*) In all these cases, the state of health is more or less altered, and the patient bears in his physiognomy the evident symptoms of a general debility, which undermines his constitution, and at length becomes fatal.

The blennorrhœa has its seat in the same part as the blennorrhagia which preceded it, that is to say, generally and commonly in the fossa navicularis under the frænum; and in other cases, in the different parts of the urethra mentioned in the preceding chapter.

The proximate cause of blennorrhœa, therefore, is a debility either of the sphincters of the excretory orifices of the mucous glands, or of the vessels of the mucous membrane of the genital parts, which seem to have lost the faculty of contracting themselves as they are accustomed to do in a state of health. But this cause is sometimes also an erosion or exulceration in the same parts, attended-always with a secretion of pus and mucus, more abundant than in a state of health.

The exciting or occasional causes of blennorrhœa are : 1°. Any preceding blennorrhagia whatever, (see the different species of blennorrhagia in the preceding chapter,) especially if it has been neglected or treated by improper remedies, and above all, if it has been attended with violent symptoms of inflammation, hemorrhage, ulcer, &c. 2°. A want of cleanliness in the genital parts, especially in hot countries. 3°. Masturbation. 4°. The abuse of coition by delicate, weak, or very irritable persons. 5°. A scirrhus tumour or fungous excrescence of the prostate gland, or of some other small gland in the canal of the urethra. 6°. An extraordinary irritability, or some other disorder of the blad-

der. 7°. The callous edges of an ulcer, or bands going from one ulcer to another, crossing the cavity of the urethra, leaving below a concealed ulcer. 8°. A stricture in one or more parts of the canal of the urethra. A bougie is often necessary to discover this cause. The discharge from this source resists all remedies, and ceases of itself after the stricture is healed by means of bougies. 9°. Mucous hemorrhoids, which have taken their road by the vessels of the genitals of either sex. 10°. In women, a sedentary life, and the habitual use of a sumptuous table; the use of steam, or the heat of foot-stoves. Sometimes also the discharge proceeds from a polypus or ulcer in the womb or vagina, or else from ascarides in the rectum or vagina itself.

From what I have said, blennorrhœa is naturally divided into two principal species. The first, the simple blennorrhœa proceeding from a relaxation of the mucous membrane, (*Blennorrhœa asthenica*); the second, the complicated or ulcerous blennorrhœa (*Blennorrhœa ulcerosa*), both of which vary according to the seat, nature, and cause of the disease.

The most remarkable symptoms which indicate an ulcer in the urethra are: 1°. The matter tinged with streaks of blood, or a flow of pure blood during a blennorrhagia, but more particularly after the violence of the inflammation is calmed. 2°. A discharge of a matter really purulent or ichorous, mixed with the

mucus in a greater or less quantity. 3°. A circumscribed pain in one part of the urethra, which becomes more sensible when a bougie is introduced, or the urethra is pressed externally at the spot which is the seat of it. 4°. An acute pain in a particular part of the urethra, especially at the moment when the last drop of urine passes, or on the emission of semen. Our opinion of the existence of an ulcer will be confirmed, if the symptoms of the preceding inflammation have been very violent; if the patient has not taken care of himself, or has been badly treated, or, as I have sometimes seen, if the urethra has been wounded by an awkward application of the syringe, or by sounds, during the inflammatory period.

It is important for the practitioner to distinguish the blennorrhœa of which we principally treat in this chapter; 1°. from blennorrhagia, or a discharge attended with inflammatory symptoms more or less violent. 2°. From gonorrhœa, properly so called, or a morbid flow of semen, diurnal or nocturnal. 3°. From the discharge excited in women by a weakness or peculiar irritability of the system of the womb, caused by excessive venery, or by frequent masturbation. 4°. From the serous discharge which often precedes and follows the menses. 5°. From the mucous and serous discharge, to which many pregnant women are subject. 6°. From the discharge called whites (Leucorrhœa), which owes its origin particularly

to a general indisposition of the body, produced by a sedentary and luxurious life: this disease often partakes of the character of gout. 7°. From a discharge produced by any other disorder, or any acrid matter whatever, herpetic, scorbutic, &c. deposited from the mass of the blood, and evacuated by the orifices of the uterine vessels, a discharge frequently without inflammatory symptoms, and become habitual, though in some cases the matter is so acrid, that it produces excoriations in the genitals and thighs. 8°. From the mucous discharge produced by the hemorrhoidal vessels, which communicate with the bladder or the genitals. 9°. From the acrid or ichorous discharge proceeding from a phagedenic ulcer, or a real cancer in the vagina or womb. 10°. From the discharge which takes place in the condylomatous or polypous excrescences of the vagina, or from a fungous excrescence.

It appears from what I have said, that most blennorrhœas are only symptomatic disorders, and their cure is consequently subordinate to a treatment suited to the principal disease.

From the preceding observations on the nature, causes, and seat of blennorrhœas, it is plain, that their cure becomes more or less difficult, according to the spot they occupy, the time they have lasted, and the cause which produced them.

Blennorrhœas, which follow a simple blennorrhagia, are also only a simple local disease.

They seem to me exactly similar to the discharge of puriform and thick mucus, which still goes on after the inflammatory symptoms of a cold in the head (Coryza) are dissipated. But, in the discharges which remain after a violent or ill-treated syphilitic blennorrhagia, or complicated with an excoriation or ulceration of the urethra, the virus is commonly absorbed, and consequently gives rise to a general syphilitic infection.

Blennorrhœas or habitual discharges in men, the seat of which is in the fossa navicularis in the lacuna of Morgagni, at a little distance from the orifice of the urethra, are the easiest to cure. Those which have their seat in some gland of the canal of the urethra, or are further back in the prostate gland, are much more obstinate. The longer a blennorrhœa has lasted, the more obstinate is it against remedies. Those which derive their origin from an ulcer in the urethra, or are owing either to an erosion of the excretory canals of the seminal vessels, or those of the prostate gland, or to an ulcer in the neck of the bladder, or in the bladder itself, are the most difficult to cure. In general, the further back the seat of blennorrhœas is in the urethra, the more they are subject to be attended or followed by strictures, dysurias, retentions of urine, and are likewise the more obstinate and dangerous.

METHOD OF CURE.

Whenever we are consulted for a blennorrhœa, our first object should be to inquire, 1°. If the disease owes its origin to a preceding blennorrhagia. 2°. What part of the urethra or the vulva is the seat of the disease. 3°. If it is a simple relaxation of the vessels of the secreting surface of the urethra or vagina, &c. 4°. If it is attended with an excoriation or ulcer. 5°. If it is complicated with a swelling of some gland in the canal of the urethra, or with a disease of the prostate gland. 6°. If the canal is perfectly free, or if there is a stricture in some part of the urethra. 7°. In fine, if the complaint is entirely local, or attended with symptoms of syphilis spread through the system of the body.

When the disease is purely local, and depends on a simple relaxation of the mucous membrane, the best remedy in general is the liquid resin, commonly called balsam of Copaiva, alone, or mixed with a small portion of alcoholised ether, or alcoholised nitric acid. In other cases, the infusion of bark in red wine, mixed with water, is preferable. For the method of administering these remedies, *vide infra* at the end of this chapter.

In cases where, for particular reasons, topics are to be preferred, I have employed with success the sulphate of zinc dissolved in water,

mixed with a little camphorated water, and injected five or six times a day. The solutions of sulphate of copper, and acetate of lead or alum in water, have been recommended for the same purpose. (See Ph. Syph.) In some cases, local cold baths and astringents, such as a decoction of oak-bark, of tormentilla root with a little alum, an infusion of tea, or gum-resin of Kino, or simply red wine mixed with water, employed as injections, are very useful. In obstinate cases, sea-bathing sometimes produces a radical cure. In all cases, during the treatment of a blennorrhœa, the patient must be warned to avoid every thing that may irritate the parts externally and internally, as pepper, ragouts, &c., and to keep the body open.

If the disease is complicated with a general infection, as happens especially when there is an ulceration in the urethra or vagina, it would be vain to attempt the cure of the discharge till the general mass is purified; and even if it were stopped it would soon return, or symptoms of syphilis would render mercury necessary. After having given mercury, or during its use, a solution of oxymuriate of mercury and oxide of lead in vinegar may be employed with advantage, diluted with a sufficient quantity of water, and injected two or three times a day.

I shall here make, respecting injections in general, as well for blennorrhagias as blennorrhœas, some essential observations, the neglect of which may occasion the failure of a cure,

though the best remedies have been employed. The syringe used for this purpose should have a short conical pipe, and of proportional thickness, so that its end, but not more than the end, may enter the orifice of the urethra. Two considerable inconveniences arise from the small long pipes that are often used. The first is, that with a small pipe, especially if it is not very smooth, the patient easily hurts the inside of the urethra, exposes himself thereby to the ulceration of the part, and consequently to an absorption of the virus. The second is, that the liquid injected, instead of advancing into the cavity of the urethra, runs out by the sides of the pipe. The body of the syringe should be a perfect cylinder, and the piston fit exactly; for if it does not fill exactly the body of the syringe, though the point of the pipe should completely stop up the orifice of the urethra, still the liquor would flow back between the piston and barrel, instead of entering the urethra; and thus the patient may imagine he has injected the liquid properly, while perhaps not a drop has entered the urethra, or only a very small quantity.

But though the syringe is made in the properest manner, and the most precise instructions have been given to the patient, they very often perform the operation so unskilfully, that the injection produces no good effect. Having therefore a good syringe, the pipe must be applied exactly to the orifice of the urethra, so that by

its conical form, it may prevent all passage for the liquid between it and the sides of the orifice of the canal. If the disease occupies the ordinary seat of blennorrhagias, that is to say, the fossa navicularis precisely above the frænum, the patient must take care to inject only a very small quantity, and to compress the urethra with one hand, at the first bend of the penis, where the scrotum begins, while he holds and manages the syringe with the other hand. He must then push the piston gently into the body of the syringe (which, while it fits the sides exactly, must nevertheless slide along easily) till he feels the urethra slightly dilated. Thus he will keep in the injected liquid for a minute or two, and repeat the same operation two or three times following. When the piston is pushed injudiciously, or too long together, the distension and irritation of the urethra caused by it often do more harm than the injection can do good.

In injections in which a part of the ingredients is subject to be precipitated, it is necessary to shake the liquor well before it is injected. In all cases, the patient should try to make water before the injection.

Another important observation that I have to make is, that young people, who have habitual discharges, after having used injections or internal remedies for some time, finding themselves better, become less attentive, and neglect them sometimes entirely for half a day, or a whole day. This omission has almost always serious con-

sequences. The discharge returns very often with double force; and I have seen several examples where the discharge increased to such a degree, that it might have been taken for a new disease. The relapse is then often more obstinate than the primitive disease; and the patient is obliged to continue the same remedies for more weeks, than it would have required days perhaps to complete the cure, if he had not interrupted the use of this remedy. Sometimes even the remedies must be entirely changed to obtain a radical cure.

In order to prevent all danger of relapse, it is prudent, and I always order my patients, to make the injections three, four, and even six times a day, if circumstances require it, as long as the discharge lasts; and to continue it regularly two or three times a day, for at least ten or fifteen days, after the discharge has entirely ceased. The same rule must be observed with internal medicines.

The pipe of the syringe should be thicker and longer for women than for men. I have found, that a cylindrical pipe of pewter an inch in diameter, and three or four inches long, was the best for procuring the good effects of the injections prescribed for them.

Besides injections, bougies are of great use, and even sometimes absolutely necessary in the blennorrhœas of men, when there is an ulcer or stricture in some part of the urethra. They may be employed alone or together with the in-

jections. With respect to bougies, I must observe, that during the three or four first days, they must only be kept in at most a quarter of an hour or half an hour each time they are used, and thus accustom the patient insensibly to support them longer: he may then be made to keep them two hours morning and evening, which is sufficient in most cases. It must be recollected, that before the application of the bougies, as well as before injections, the patient must always try to empty his bladder, in order to give the remedy time to produce its effect on the part affected. If the application of the bougie causes, as I have sometimes observed, a tension and pain in the spermatic cord, or a swelling of the testicle, the use of it must be suspended for some days. I have seen this happen from too large a bougie, and the effect went off when a smaller one was used. In general, small bougies must be preferred in the beginning.

As to habitual discharges, complicated with strictures of the urethra, and attended with more or less difficulty of making water, I refer the reader to chap. x. of this volume.

If the cure of a blennorrhœa is not effected by the use of medicines, injections, or bougies, it is sometimes proper to inject liquids capable of exciting an irritation and inflammation of the urethra, and especially in the affected part. This means has often succeeded after the best astringents had failed. For this purpose may

be used the injections *ad Blennorrhœam*, (Ph. Syphil.)

It is probably on this principle, that Dr. *Cullen* observed, that obstinate blennorrhœas have sometimes been cured by violent exercise long continued on horseback, as a journey from Edinburgh to London ; that is to say, by exciting an inflammation in the affected parts. We have examples of similar discharges being sometimes cured by coition ; but it is a remedy, which an honourable practitioner would never recommend, as these discharges are sometimes of a contagious nature, and the patient would run the risk of communicating the disease to a healthy person, and of making his complaint worse, instead of relieving it.

Besides the injections we have mentioned, several other means have been employed with success in blennorrhœas of a very obstinate nature, such as injections with strong styptics, or even with oil of turpentine. A friend of mine observed, that in some cases a blister applied externally to the affected part, or to the perinæum, had been very useful. An obstinate discharge has been removed by an injection of the tincture of (*Psychotria emetica*) ipecacuanha. The late Mr. Birch observed some cases, in which a slight electric shock passed through the urethra effected a cure.

I mention all these means, because one is sometimes embarrassed what to do in obstinate affections of this kind.

Cold baths have also been recommended in obstinate blennorrhœas, and I have seen very good effects from them ; but I have also seen in other cases that they increased the discharge : other practitioners have observed the same. Sea-bathing is often very useful, as well as a local bath of cold water, either pure, or mixed with vinegar or brandy, with which the patient should wash his genitals three or four times a day. Sometimes frictions with mercurial ointment applied to the perinæum every day, for two, three, or four weeks, have produced a radical cure.

In general, it is proper, and even very often necessary in obstinate blennorrhœas, to change the remedies and injections ; for it is observed, that a weaker injection sometimes produces a good effect, after a stronger one has been employed without success, and *vice versâ*. In many cases, it is also right to combine internal remedies with the external means.

After having thus amply treated of external remedies, we shall consider those that may be employed internally, either alone or combined, according to the exigence of the case, with the local applications we have just mentioned.

The internal remedies, that have been found most efficacious, are :

1°. *Mercurial preparations*.—These are always necessary, when the disorder is attended with an ulcer in the urethra, especially if it be inveterate, or when there are signs of a general infection. In such cases, mercurial frictions, or

pills made with turpentine and the black oxide of mercury, are often very proper. I have seen blennorrhœas, that resisted all remedies, cured by a complete mercurial course.

2°. *Balsams and resins*.*—Among these substances the one most commonly employed is the liquid resin, called balsam of Copaiva. But I have observed, that there is a species in commerce, which gives violent colics: in general this substance is apt to cause disagreeable effects in the stomach. To prevent this effect, the best way of giving it is thirty or forty drops in a small glass of fresh water, twice a day, morning and evening, or from fifty to eighty drops at once at noon, and to swallow immediately after, in a small glass of water, fifteen or twenty drops of the *tinctura aromatica sulfuricata*, or better still the *tinctura myrtus-pimentæ sulfuricata*, in order to make the balsam easier on the stomach. Half a drachm of turpentine or balsam of tolu, or the liquid resin called Canada balsam, will do as well. I have an example of a young man, who being tired with the duration of a most obstinate habitual blennorrhœa, swallowed all at once a great quantity (two or three ounces) of Copaiva balsam, and was cured.

* We do not know exactly how the balsams or liquid resins act; but it is a fact, which I have constantly observed, that these remedies, administered before the heat of urine and pain in erection has disappeared, though they diminish the symptoms, are very apt to produce a swelling and inflammation of the testicle, commonly called a venereal testicle.

Sometimes the balsams combined with the tincture of guaiacum, or the gum-resin of kino, produce a desirable effect. But in all cases, when these balsams or resinous substances are prescribed, the patient must be ordered to abstain, during the use of them, from fruits and sweet-meats, as they would counteract the effect of the balsams.

3°. *Corroborants*. — Among these, the gum-resin we have just mentioned deserves the first place; the bark of the *cinchona officinalis* in powder or infused in red wine, or, what is still better, infused in lime-water; the root of tormentilla in powder, or in extract, in the form of pills, joined, according to circumstances, to preparations of iron, or the balsamics, are useful and efficacious remedies.

The *serum aluminosum* sometimes produces the desired effect. The tincture of cantharides, given in the dose of twenty-five or thirty drops in water, has sometimes effected a cure in cases where other remedies have failed; but it is a remedy which requires precautions, as it often seriously affects the chest, and may do a great deal of harm, especially to persons of a delicate and irritable habit.

In fine, there are obstinate blennorrhœas of the genitals, which are only cured by a complete mercurial course.

There are circumstances, however, in which all our efforts to cure an habitual discharge are vain; and we sometimes see, that nature alone

performs a cure in time, after all the resources of art have been exhausted to no purpose. This happens in those habitual discharges, which are produced by singular causes, of which examples have been transmitted to us in anatomical dissections; when, for example, two ulcers of the urethra happening to be placed opposite each other, some of their parts reciprocally join, and form a sort of bar across the urethra, with an ulceration below. If there be any reason to suspect the existence of this cause, the only remedy is the use of bougies, or, if the bars are not too strong, an attempt might be made to break them by introducing a stylet or sound into the urethra. I leave my reader to judge if the very troublesome and obstinate discharge I am going to describe, belongs to this class.

I was consulted some years ago by a man, concerning a blennorrhœa with which he had been affected for about ten years, and for which he had consulted physicians and surgeons in different countries. Sometimes the discharge stopt for some days; but it soon re-appeared, especially after riding or coition. On these occasions, the patient always experienced some indisposition, and the next day a small discharge, which if it stopped appeared again on a repetition of the same cause. This complaint was the more vexatious as he had an intention of marrying. On examining the patient, I found that the seat of the complaint was very far back in the urethra, towards the perinæum. I made him try all the

remedies both internal and external that I could think of; but I did not succeed in effecting a radical cure. I considered his complaint to be a callous ulcer; and on this supposition, I made him wear bougies for two months, without the least effect. Being obliged to continue a journey, I left him very little relieved by all I had done; as his affairs rendered it necessary for him also to go to Paris, I advised him to consult there every medical man who he thought might relieve him. The result he related to me himself is as follows :

“ After my arrival at Paris, I consulted, according to your advice, all the most celebrated practitioners. Their different opinions on the cause, nature, and treatment of my disorder made me more uneasy than I was before. Some advised a new mercurial course; others prescribed different remedies, both internally and externally. I showed them all the different prescriptions you had given me successively. They were surprised that none of them had succeeded. Nevertheless, some new injections and internal remedies were prescribed for me, rather, I imagine, to satisfy me for my money, than from any hope of doing me good. In fact, I was for three or four months precisely in the same state as when I arrived at Paris. But, however surprising you may think it, the last person I consulted appeared to me the most ignorant of any I had seen; notwithstanding, I allowed him to sound the passage of the urethra with the

catheter, that he might ascertain the part affected. It entered as usual very easily till it reached the seat of the disorder, where it experienced the same obstacle as before, and which I had warned him of: notwithstanding, he endeavoured to force it in farther; I told him he gave me excessive pain, but he persisted, and it went through. Some blood immediately came out of the urethra. The surgeon appeared much alarmed, made a thousand excuses, drew out his instrument, took his fee, and left me very sorry for having employed him. I expected to be worse the next day, and to suffer much from his awkwardness; but it proved quite the contrary. I have been free from the complaint for two months past, I ride and frequent women without any bad effects, in short I am radically cured. The gratitude I owe you for the trouble you took on my account, obliges me to communicate this particular case to you, which may be of some use to you, and which you will explain perhaps better than me, or those to whom I have mentioned it."

There remains sometimes a sort of cordee or curvature of the penis, after all the other symptoms of blennorrhœa are dissipated. Frictions with mercurial ointment, or camphorated olive-oil, on the penis; the ammoniacal liniment, spirituous lotions, or electricity applied to the same part, are the most suitable remedies in such cases. Some authors have also recommended the internal use of bark.

In all obstinate blennorrhœas which have their seat very far back in the canal of the urethra, we should carefully examine if there is not a stricture or an ulcer, or an affection of the prostate gland. In all these cases, those complaints must be remedied, or the discharge will never be stopped. When the prostate is swelled and hard, I have seen examples where, after a mercurial course, the repeated application of blisters or cupping glasses to the perinæum, and the use of the inspissated juice of the *conium maculatum*, in large doses, has succeeded after other remedies have failed.

A blennorrhœa proceeding from an affection of the prostate gland, is distinguished from that of the urethra, by the nature and odour of the humour discharged: it resembles the white of egg, and comes out without pain, especially before or after the exertion of urine or the stools; this mucus has a nauseous smell, and is sometimes mixed with semen. This disease is soon followed by a general weakness or debility; and this exhaustion is attended with paleness of the countenance, and a general emaciation of the body, and leads by degrees to death, if the patient has deferred, as too often happens, to consult an enlightened physician, or if proper means have not been taken in time.

All the talents of an able physician are often required for this treatment. The most efficacious remedies are cold baths, injections with the metallic oxides or salts, fomentations with hem-

lock, blisters in the perinæum, a flannel waist-coat in damp and cold weather, and internally strengthening medicines, with a proper regimen. The most proper remedy for calming the irritation is the aqueous extract of opium, or the inspissated juice of the *hyoscyamus niger*. (See also chap. xi.)

The real gonorrhœa (*spermacrasia seu gonorrhœa propriè sic dicta*) is a discharge or morbid emission of the semen or spermatic liquor, frequent and debilitating, with or without any voluptuous sensation (*seminis excretio frequens, involuntaria, debilitans*). Under this genus are comprehended generally nocturnal or diurnal pollutions, with or without libidinous sensation; with a weak or incomplete erection, or even without erection or venereal desire. Dr. Wichman has well treated this subject in a small treatise, intitled *De Pollutione diurna*, 1782.

These habitual discharges, which proceed either from weakness or relaxation, or sometimes from too great an irritability of the testicles, of the vasa deferentia, or the seminal vessels, and their excretory canals, require a very attentive and prudent treatment; otherwise the patient becomes the victim of that species of consumption described by Hippocrates, under the name of *tabes dorsalis*. As the treatment of that disease does not enter into the plan of his treatise, I shall only observe here in general, that to obtain a cure, the patient must be strengthened, not all at once, but gradually, by internal and

external remedies, and care be taken especially to diminish the irritability of the parts. He must abstain by degrees from his dangerous habits. I have seen cases where it was necessary to tie the hands of a patient during the night with a bandage, as they touched and excited the parts during sleep as it were involuntarily. The young physician will do well always to bear in mind, especially in these cases, that a sudden transition from one regimen, or one habit to another, is often contrary to the object the practitioner has in view, and that a prudent physician, by conforming to this observation, sometimes effects a cure, for which the best remedies would have proved insufficient, and all the resources of art have totally failed.

I have seen, though much more rarely, similar complaints in the other sex. Some years ago I attended a woman twenty-eight years of age, who, a year and a half after a miscarriage, suffered very frequent involuntary nocturnal pollutions, excited by libidinous dreams, and attended with all the symptoms of *tabes dorsalis*; her lungs even began to be affected by the complaint; however, I had the satisfaction to cure her completely.

CHAPTER V.

OF THE AFFECTION OF THE SPERMATIC CORD AND
THE EPIDIDYMIS, AND OF THE SWELLING AND
OTHER DISEASES OF THE TESTICLES.

WHEN a syphilitic blennorrhagia has been treated with improper remedies, or when the patient takes too violent exercise, and especially if he exposes the affected part to cold, a tumour and a dull pain often come on in the groin, which extend to the scrotum; the testicle, or rather (as we shall see presently) that part of the testicle called the epididymis, grows large and hard, and the scrotum swells and becomes red and thicker. This disease is commonly, though very improperly, named *a venereal swelling of the testicles*, or *venereal testicle*, or *a clap fallen into the scrotum*, and sometimes also *a humoral hernia*.

It is very remarkable, that this disease seldom appears in the beginning of a blennorrhagia, or while the inflammatory symptoms are at the highest; but rather towards its decline, and often near the last period of the disease, when the symptoms of inflammation seem very much diminished.

This tumour always begins with a tension and

a dull pain in either groin, which stretch along the spermatic cord as far as the scrotum, and by a swelling of the same cord and of the epididymis, which, to the touch is evidently hard and painful, the scrotum on this side appears red and swelled. If the disease be left to itself, the testicle begins to be affected with all the symptoms of local inflammation : it becomes hard and painful, and the tumour is often of an enormous size. Sometimes this swelling is accompanied with general irritation, with a violent fever, and a quick and hard pulse in strong and plethoric constitutions, or a weak and very quick pulse in delicate and irritable constitutions.

In some cases, the patient feels pains in the loins, and has nausea and vomiting. In general, the discharge diminishes considerably, and even sometimes totally ceases before these symptoms are exhibited ; but sometimes this does not happen, at least in a sensible degree, till one or two days after the swelling has begun to appear. I never saw both testicles affected at the same time in these circumstances. Sometimes it happens, that after the swelling has gone off on one side, the other testicle begins to be attacked. The same thing happens sometimes after an ischuria, proceeding from an affection of the neck of the bladder, in consequence of the suppression of a blennorrhagia.

This disease or irritation of the spermatic cord, and the epididymis, &c. is generally produced, when the patient, attacked by a syphi-

litic blennorrhagia, has taken too violent, and even sometimes apparently moderate exercise on foot, on horseback, or in a carriage; or when the penis has been struck with cold, or imprudently washed with cold water, or been exposed to a current of cold air, as, for example, on making water at the corner of a street. It is very often produced by irritating, or acrid, astringent, &c. injections, and especially by repeated purgatives, or the internal use of resinous or balsamic remedies. Several practitioners of my acquaintance think they have observed that nocturnal pollutions, and any other act which occasions ejaculation, tend more than any other cause to produce this disease. It is for this reason that connection with women during blennorrhagia often brings it on. The testicle itself, as far as I have been able to observe, is never swelled in the beginning of the disease, but becomes affected afterwards.

I do not speak here of the swelling and inflammation of the testicles produced by any other cause internal or external, as, for example, by a contusion, a metastasis from the parotids, &c. capable of exciting a local inflammation, as ancient authors have already observed.

It was long believed that this pain and swelling were produced by the absorption and deposition of the syphilitic virus from the canal of the urethra into the testicle itself; but this absorption and transportation of the virus from the urethra into the testicle are a supposition

which seems to be founded neither on facts nor on anatomical knowledge.

Some authors speak also of a swelling of the testicles, which sometimes happens after the disappearance or desiccation of syphilitic ulcer of the prepuce or glans. I do not recollect having ever observed any case of this sort ; and, therefore, shall not dwell any longer upon it ; but I witnessed another which I think worth relating.

The patient had been attacked several years before with a venereal testicle, as he called it. This tumour having been ill treated occasioned a fistula *in ano*, when the swelling disappeared. The operation for the fistula was performed, but when he was on the point of recovering, the swelling of the testicle returned. I succeeded in dispelling the tumour, for which I was consulted, by bringing on a discharge from the urethra, and I completed the cure by the use of internal medicines. I must here add, that I have seen two or three times in the course of my practice a swelling of the spermatic cord, and of the epididymis, from the application of a bougie a little too large that had been used for a stricture in the urethra.

The proximate cause of this swelling of the spermatic vessels, seems to me to be an irritation or inflammation of the orifices of the *vasa deferentia* of the seminal vesiculæ ; and I believe the seat of this swelling is generally in the urethra, at the spot called *veru montanum*, or

caput gallinaginis. There are however other cases, as I have remarked above, where the seat of the inflammation is originally in the testicle itself.

Some modern authors attribute this swelling to the sympathy of the testicles with the urethra; others to the extension of the inflammation along the urethra and the vasa deferentia to the testicles; others, in fine, suppose that this disease is always the effect of an exuberance or an accumulation of semen in the testicle. But, if this disease be merely owing to sympathy, why should the swelling happen so seldom, as long as the discharge from the urethra continues regularly, or while the symptoms of inflammation and irritation of the urethra are very violent? If the extension of the inflammation along the urethra were the real cause of this tumour, it seems that wherever the inflammation is violent, and extends along the urethra to the prostate or the neck of the bladder, there should always follow, or at least generally, a swelling of the testicle; which, however, does not happen. In fine, if this disease were owing merely to the accumulation of semen, as soon as that ceased, the swelling should naturally and constantly abate, or even disappear entirely, which we do not observe. On the contrary, we often see young men attacked with this complaint have involuntary nocturnal pollutions, without being cured or even relieved by them; but even if things were

so, I should still ask whence comes this accumulation of semen, and these violent effects, while we never, or hardly ever observe them in reserved young men, though robust and healthy. All these theories, therefore, appear to me absolutely false, or at least very unsatisfactory. The only certain and well averred fact is, that a particular and extraordinary irritation excited in the urethra, during a syphilitic blennorrhagia by any cause whatever, such as acrid injections, the use of balsams, cathartics, &c. cold, coition, or a mechanical stimulus, will produce this disease. Perhaps even in some cases, the virus changing its seat and fixing on the excretory orifices of the seminal vesicles, lower down in the urethra, irritates them directly; and this irritation, communicated to the vasa deferentia and the epididymis, produces in them this disorder. I do not deny that the secretion of semen, more strongly solicited, may also afterwards contribute to the swelling. I even believe that to this stimulus must be attributed the nocturnal pollutions commonly observed in the beginning and during the course of this disorder; but these pollutions have no effect whatever in diminishing it; probably the evacuation proceeds then only from the sound testicle. I shall now state the opportunity which I had of elucidating the nature of this disease.

At the age of five-and-twenty, I was attacked with a syphilitic blennorrhagia, which, acting on a delicate and irritable body, was attended with

violent symptoms. I consulted one of the first physicians in Europe, who advised me to take a great deal of mucilaginous liquid and purgative pills twice a week, the principal ingredient of which was the submuriate of mercury. The result of this treatment was, that after the second dose of the pills, I was attacked with what is called a venereal testicle. Attentive from the beginning of my disorder to all the symptoms that appeared, I felt at first an uneasiness and tension, together with a dull pain all along the spermatic cord of the right side, which extended to the scrotum; the same parts were a little swelled and painful to the touch. I was obliged to go to bed. The next morning, on examining attentively the parts affected, I was greatly astonished to find that the testicle was in its natural state, and without pain; but that the epididymis was much swelled and hard, the spermatic cord tumefied with a sensation of dull pain, as if the parts had been stretched or pressed. I communicated this observation to several physicians of my acquaintance who came to see me; they all thought I was mistaken; but on examining themselves, they found the part affected as I had said; and they all considered the fact as new and extraordinary. According to the advice of the physician who attended me, I constantly applied warm emollient cataplasms to the scrotum for several days; but, during the use of them, my complaint, instead of diminishing, increased considerably.

The discharge had almost entirely disappeared from the beginning; the testicle became very hard and swelled, and I felt a peculiar uneasiness in the part; the pain along the urethra was sensibly increased, and especially when I made water. I therefore resolved to take off the cataplasms, and to put on a suspensory to relieve the painful tension; and, with the hope of bringing back the discharge, if possible, I exposed the genital parts two or three times a day to the steam of hot water. These means had the desired effect; the second day after their application, the discharge increased, and I was soon relieved; in a few days the complaint of the testicle and spermatic cord was removed, and a few weeks after the blennorrhagia was radically cured.

I was extremely desirous, as may be easily imagined, to verify if this observation was only a particular fact, or if it was connected with a general law that remained unknown, and had escaped the attention of practitioners. I was completely satisfied in this respect, and ascertained by all my subsequent observations, that the fact was constant, as I had remarked it on this first occasion. I convinced myself that the only parts primitively affected in this disease, are always the vas deferens and the epididymis alone of one side; that the testicle itself is never swelled in the beginning of this complaint, that is to say, for the two or three first days; and if it becomes so afterwards, this

accident is only owing to bad treatment, or to the negligence of the patient. I have observed moreover, that the fever which so frequently accompanies this disease is never a primitive complaint; but only a secondary or symptomatic fever, in consequence of the local irritation, the characters of which vary according to the difference of constitution in patients; and that by employing the method which I shall indicate below, the physician may almost always, if called in time, prevent this fever as well as the other bad consequences of the disease.

I have connected with these facts two others not less important or general; namely, 1°. That the discharge, and even sometimes the other symptoms of inflammation of the urethra, cease entirely, or at least diminish considerably, before or during the first two or three days of this disease. 2°. That the disease increases and continues as long as the discharge from the urethra does not re-appear, or some other part of the urethra is not affected; and that on the contrary the symptoms grow milder, from the moment the suppressed discharge is re-established, even sometimes when ever so little.

This disease, treated in the manner I shall explain, yields in general very easily in a very few days, but if the patient neglects it, or it is not treated with proper remedies, or if the patient has had a relapse, not only it often becomes

very obstinate, but moreover, by exciting a real inflammation of the testicles, becomes sometimes very dangerous by the fever which accompanies it, or by the suppuration, induration, and even mortification of the parts affected, which are the consequences of the inflammation.

It must be observed here that after the speediest and happiest cure, the epididymis remains hard for months, and even whole years; but this accident is never followed, as far as I have observed by any bad consequences. This hardness generally dissipates gradually of itself.

From these facts and observations on the seat, symptoms, and nature of this disease, I was naturally led to a practice more conformable to nature, and consequently more successful and solid than that which had till then been followed. I shall now explain it.

METHOD OF CURE.

The first care of the physician must be, in all cases, as I have observed in the chapter on blennorrhagia, to endeavour to prevent diseases or their evil consequences; and, if that is impossible, to relieve and heal them in the speediest and surest manner.

If the reader properly considers that the disease in question only attacks men affected with a blennorrhagia, and that whatever causes the suppression of the discharge tends to produce this

swelling, he will easily perceive, that to prevent this troublesome complaint, he must avoid with the greatest care whatever is capable of increasing the irritation and inflammation of the urethra, and to stop the discharge of the matter: as cold, violent exercise, and principally ill-chosen injections, purgatives, balsamics, &c. But the most efficacious method I have found for preventing this disease is, to avoid all tension of the spermatic cord: which is effected with complete success by the uninterrupted use of a suspensory from the beginning of every blennorrhagia. For this reason I never fail to recommend it, from the moment I am consulted on a blennorrhagia. By observing exactly these two rules, this accident may be so completely avoided that none of my patients who punctually followed them were ever attacked with this vexatious disorder.

But we often meet in practice with negligent or indocile patients; at other times, we are called to persons who, having been treated without these precautions, are already attacked with the complaint. In this case, the first care of the physician should be to examine well the part affected, to determine with precision if the disorder is still limited to the epididymis and vasa deferentia, or if it actually attacks the testicle itself; and then, what progress it has made, and what symptoms it has produced in the affected part, or in the whole system,

In either case the following indications are to be attended to.

1°. To diminish the tension and pain of the parts affected, which would contribute very much to maintain and favour the progress of the disease.

2°. To moderate or dissipate entirely, as soon as possible, the irritation which has its seat in the urethra, or in the *veru montanum*.

3°. To prevent the troublesome consequences which an inflammation of the testicle, or a fever might have.

4°. To remove these last effects, if they already exist.

To fulfil the first indication, a suspensory must first be ordered, or for want of it a handkerchief round the scrotum, to keep the testicles constantly and perfectly suspended, or rather gently bedded in this artificial bag. If the pulse be quick, full, and strong, the patient must be bled directly. This bleeding must be copious, especially if the testicle itself is affected, with a consideration however of the constitution of the patient and other circumstances. If the fever is not violent the bleeding is not necessary; and this is almost always the case when we are called in the beginning of the complaint: for, as I have already observed, the fever in this case is never a primitive complaint, but entirely symptomatic, or a consequence of the irritation of those delicate parts. The evacuation of blood is also useless and

even hurtful if the pulse is very quick and feeble. In other cases when the swelling and local inflammation are very great, without or with moderate fever, the local application of leeches is better than bleeding.

To calm the irritation which has its seat in the canal of the urethra, the internal and external use of sedatives is the most efficacious remedy, and contributes at the same time to restore the suppressed discharge. I begin, therefore, if there is no fever, or as soon as it is moderated, by giving a dose of opium; a grain, for example; or, according to circumstances, a glyster, composed of two or three ounces of linseed-oil and a decoction of barley, and fifty or sixty drops of the tincture of opium, commonly called Sydenham's liquid laudanum. I repeat it every ten or twelve hours, taking care, in case the patient has not had an ordinary stool, to give a simple glyster before the sedative one, to void the excrements, which by their irritation in the rectum might counteract the effect of the remedy. In some cases, especially when sedatives are to be employed, I have found the extract of *hyoscyamus niger* preferable to opium, alone or mixed with the extract of hemlock. I have obtained from this manner of administering sedatives such happy and speedy effects, that I do not hesitate to recommend it as preferable to every other. I have seen many cases, in which the swelling and pain have been dissipated, and the discharge restored by this method in from

twenty-four to forty-eight hours; and in the case where the effect was not so speedy, it always relieved the patient, and prevented the fever. It is superfluous to add that the patient must keep himself quiet in bed, and not quit the suspensory a moment; he must observe a light diet, and drink nothing but a decoction of barley with figs, or emulsion of almonds, or decoction of hemp seed.

But having always observed in the most rebellious cases, that the symptoms of irritation and swelling were never dispelled till the discharge had re-appeared, at least in part, and that at the moment when the blennorrhagia recommenced, the pain and swelling vanished by degrees, I directed my whole attention to attain this end. I have found no method more certain for this, than to expose the genital parts to the steam of hot water, mixed with a little vinegar. For this purpose, I seat the patient on a close-stool over the steam of water for a quarter of an hour or half an hour, three times a day; always taking care he has his testicles supported by a suspensory. From this he goes immediately to bed, and throws off the wet suspensory for a dry one, so that the vasa deferentia may never be in a state of tension capable of exciting irritation, or at least of contributing to it. For greater certainty, in the interval of these local baths, I order the penis to be rolled up with an emollient cataplasm made of bread and milk with a little oil to keep it always soft and longer

warm. But I have found, that these cataplasms applied on the testicles themselves, as several authors recommend, are of such little use, that I no longer prescribe them.

If after the application of these means, the discharge does not return, or even before employing them, when the danger and sufferings of the patient are very great, I have since found that the application of a common soft emplastic bougie for half an hour or an hour, and repeated according to circumstances, contributes very efficaciously to re-establish the discharge and to dispel the tumour of the testicle.

If the patient does not go naturally to stool, that the excrements may not accumulate, I order a common glyster every day or every other day, not forgetting to repeat the opium or some other sedative, especially at night. By proceeding in this manner, one may almost always have the satisfaction of curing in a few days a disorder which, in the ancient method, often requires several weeks, and even after all that time, sometimes terminates by a suppuration or induration of the testicle.

The restored discharge is treated like a common syphilitic blennorrhagia, taking the greatest care against a new suppression, which might easily produce a new swelling of the testicle.

After the cure of this disorder, there always remains, as I have said above, a hardness of the epididymis, which goes off slowly, and is even sometimes apparent many years after. I cannot

decide for want of a sufficient number of facts, if this hardness hinders the excretion of semen in that testicle, and consequently affects the powers of generation. Several patients, whom I have requested to be attentive to this point, have informed me, that it seemed to them, that the affected testicle remained, long after the disease, wholly inactive in coition, but at length recovered its natural functions.

To fulfil the third indication, that is to say, to prevent the troublesome consequences of an inflammation of the testicle, it must be remembered, that I have established as a principle, that this disease, excited by the syphilitic virus lodged in the urethra, is never originally an inflammation of the testicle; but that it becomes such only by bad treatment, or the negligence of the patient; and that it is almost always in the power of the physician, if not called too late, to prevent this inflammation and its consequences, by the method we have described.

If the inflammation of the testicle (*Orchionchus phlegmonodes seu inflammatorius*) has unfortunately taken place, before we are called, or is produced by other causes internal or external, nothing must be omitted to dispel it as soon as possible, and to prevent its consequences, which are suppuration, mortification, or chronic or scirrhus induration of the testicle. Warm and emollient fomentations and cataplasms, so useful in the local inflammations of this disease, and recommended by several authors, are not only

useless, but even prove hurtful, by evidently favouring the suppuration, which there is so much reason to fear and to avoid. If this swelling of the testicle is attended with an inflammatory fever, the patient must be bled as I have said above; and if, after bleeding, the pulse is not softer and slower, the bleeding must be repeated in eight or ten hours. In some cases, principally in those where the symptoms of inflammation are rather local than general, the application of eight or ten leeches to the perinæum and scrotum is preferable. When blood has been drawn by either of these means, it is well to apply to the scrotum and perinæum cold fomentations or cataplasms, renewed as soon as they get warm. For this purpose, compresses folded in four are steeped in cold water, plain or mixed with a little liquid acetate of lead; or, according to circumstances, in a solution of acetate or muriate of ammonia in cold water, never neglecting the suspensory and other means recommended in the second indication. I must not forget to mention here, that to dissipate a recent swelling of the testicle, snow or ice, or iced water, has been used with success, by renewing the application every half hour or hour, and many patients have thus been cured in three or four days. In all cases, the patient must keep himself in a horizontal position during the course of this disease.

The fourth indication is to remove the consequences of an affection of the testicle. If the

inflammation has been followed by suppuration or mortification, the organ is destroyed, and its function lost for ever: here art can do nothing. Happily this misfortune is not common. It happens oftener that the symptoms leave behind a chronic induration of the part, which requires a particular treatment, that we shall now describe.

OF THE INDURATION AND OTHER DISEASES OF THE TESTICLES.

This induration, commonly called a scirrhus of the testicles, happens when the swelling of the epididymis has been neglected or ill treated. The same accident also sometimes happens after an inflammation of the testicle, proceeding from any other cause whatever, either internal or external, and then both testicles are sometimes equally affected.

I have found in such cases, that the epididymis was always very hard and swelled, and sometimes the hardened testicle also, but more commonly diminished in size, and as it were compressed in its substance. This affection is sometimes attended with a tensive and painful sensation; at other times there is no pain. The testicle thus affected is, according to the observations of patients, evidently without action in coition; and the patient would be incapable

of generating, if both testicles were attacked with the disease.

This complaint seldom lasts long without degenerating. It then produces a dilatation or tumour of the spermatic vessels of the cord and testicle (*Orchionchus spermaticus*), commonly called, though very improperly, *varicocele* or *cirsocele* (from the Greek *Κίρσος*, *varix*, and *Κηλη*, *tumor*): a name which should be reserved for the real varicose swelling of the blood vessels of those parts; but even that disease is better characterised by the name of *Orchionchus varicosus*. At other times an unequal and hard tumour of the testicle, or epididymis, or spermatic cord, is produced, commonly called *sarcocele*, (from the Greek *σαρξ*, *caro*, and *Κηλη*, *tumor*), and which I called with much more precision, in my nosology, *orchionchus sclerodes* or *scirrhus*.

If this swelling becomes painful, it threatens to terminate, and often does terminate, in a real cancer (*orchionchus carcinomatosus*), which necessitates speedy castration or *orchiotomy*. To these complaints is commonly added a morbid dilatation of the lymphatic vessels of the spermatic cord in their whole length to the kidneys, and these organs at last become also affected. Nothing, therefore, must be neglected to excite nature speedily to discuss and resolve this induration as soon as possible.

I shall now enter into a detail of the remedies, which I have employed with success in different

swellings of the testicle, as well as those that have been recommended by different authors.

If the patient has not put on a suspensory, our first care must be to make him wear one. He must remain quiet in bed, or abstain as much as possible from exercise, and observe a very sober regimen.

If the steam of warm water with vinegar, directed on the affected part, three or four times a day, with the precautions and by the process we have recommended, does not bring back the discharge, nor produce a resolution in eight or ten days, the application of bougies must be particularly tried, which have succeeded with me on many occasions. Authors have recommended in this case, to give the patient an emetic, ipecacuanha, or the sulphate of zinc. The use of either of these remedies is indifferent, provided the vomiting takes place with much nausea, and without acting too much on the intestines. It is therefore proper to order the patient to drink little, or even to take no drink to help the vomiting in the intervals; a cold fomentation to the testicles is useful, made with an aqueous solution of acetate of ammonia, to which is added a small quantity of alcohol, or, according to circumstances, a cataplasm mash, with crum of bread, water, and a spoonful of acetate of lead. The patient should often repeat these cold fomentations, and continue them for several days. If the tumour is not altered, the emetic may then be repeated. Sometimes repeated purgatives

have been useful. Frictions with the ammonia-cal liniment, or mercurial ointment, alone or joined with camphor, on the perinæum and scrotum twice a day, often produce a good effect. Mercurial fumigations applied to the genitals, to stimulate the vessels, and thus restore their action, deserve a trial. In some cases, the internal use of mercury is necessary; it might also be proper to make an experiment of the remedy recommended by Celsus, in an inveterate induration of the testicles, produced by any cause whatever. It is a cataplasm made with the root of the *Momordica elaterium*, boiled in mead (*mulsum*) and afterwards bruised.

Lately has been greatly extolled, the decoction of the bark of the root of the *daphne mezereum* internally, and the application of a cataplasm made with the powder of that root; but the use of either, as well as of the foregoing, requires prudence, on account of the acrimony of these substances. Several patients to whom I have given the latter decoction were so much incommoded by it, that they would not continue it. It is very probable, that if it produces the desired effect, it is by exciting nausea and vomiting. The late M. ACREL, a celebrated surgeon at Stockholm, has communicated to the public some observations, which show that a decoction of the root of *ononis spinosa* given internally, has succeeded in several cases when other remedies had failed. Half an ounce of this root is boiled in a pound and a half of water, which is reduced to

a pound ; this decoction is sweetened with syrup, and a spoonful is given to the patient every three hours.

Other practitioners have also obtained good effects from the decoction of ononis, made with an ounce of the root boiled in a pound of water, and given to the patient every day ; and others have given a drachm of the root in powder twice a day.

Professor PLENCK recommends the root of the *atropa mandragora* pulverised, of which a cataplasm is made and applied warm. In similar cases, has been prescribed also, the internal and external use of hemlock (*conium maculatum*).

In obstinate cases, I would recommend mercurial fumigations applied to the part, a quarter or half an hour every morning for twelve or fifteen days.

The application of the ammoniacal liniment, composed of oil mixed with a little ammonia, has been found of use, as I have remarked before ; and in several circumstances, fomentations with the ammoniacal muriate and vinegar mixed with water.

The late Mr. BIRCH assured me, that he had several times applied electricity in these cases with success.

I was told by VAN SWIETEN, that he had employed for an indolent chronic induration of the testicles, an ounce of carbonate of lime, in a pound of acidulous Austrian wine, or Rhenish wine, (Hock,) of which the patient took three

or four table spoonfuls, morning and evening. I had occasion to see the patient, who informed me he had always been perfectly well since, but that his complaint was not owing to a venereal cause. If this wine is not at hand, the acetate of lime may be used, or perhaps still better muriate of lime, or in fine muriate of barytes.

It must be observed however, that it sometimes happens that all these remedies fail, especially when the induration has lasted obstinately several months or years, and owes its origin to a syphilitic blennorrhagia, ill treated, neglected, or suppressed.

In several tumours or indurations of this kind, as well as in some affections of the bladder and urethra, especially in certain species of ophthalmias, which sometimes happen after ill treated or ill cured blennorrhagias, I have observed, after having exhausted without any effect all the remedies recommended, that the patients were cured by getting a fresh syphilitic blennorrhagia.

A sufficient number of observations at last determined me to try in such cases when very obstinate a new remedy, which is the inoculation of a blennorrhagia. I saw it employed for the first time, about thirty years ago, in a great military hospital. Though many very specious objections may be made against this practice, every practitioner, who has the happiness of his patients really at heart, and who has seen the troublesome consequences with which these indurations are sometimes attended, will easily agree

with me, I trust, that, in similar cases, it is better to try *remedium anceps*, than to leave the patient exposed to a cancer or other diseases, which end either by being fatal, or necessitating the extirpation of the testicle. I can propose this new method with the more confidence, as from experiments made on a great scale in some military hospitals, as well as in all the cases in which I had recourse to it in my private practice, the success has perfectly answered the expectation. In order to make this artificial inoculation, matter taken from a patient affected with a blennorrhagia or a syphilitic ulcer, is applied to the urethra, by means of a short bougie, or any other process; the bougie is left in the urethra for some time, and by this means an irritation and consequently a new blennorrhagia is produced.* (See also the following chapter).

There are inflammations and indurations of the testicles and spermatic vessels which owe their origin, as I have already observed, to other internal or external causes, as a contusion; a metastasis from the parotids, &c. of which the ancients, and in particular Hippocrates, as well as Celsus, have taken notice. But the treatment of these complaints does not enter into the plan of this work. I shall only relate here

* For several years, I have used, in all such cases, a simple bougie without any virus, and have left it applied till it produced a sensible irritation in the urethra, which had the same success as if it had been impregnated with the syphilitic virus.

a particular case which I had occasion to see, and which deserves the attention of the practitioner.

A young man of twenty, being afflicted with scrophulous tumours in the neck, took, by the prescription of a physician, the decoction of the woods ; but he had followed this advice only a few weeks, when he was attacked with a cough, which in a fortnight more, produced a *hæmoptysis*. Though he had left off the decoction, and made use of other remedies that had been advised, the cough continued several months, attended from time to time with a spitting of blood or bloody mucus. Being consulted, I declared that I thought the lungs were affected with scrophulous tubercles, for which I knew no remedy, and I advised him to consult the first physicians in the town. The remedies they ordered had not the least effect on his cough ; but he was tolerably better in other respects. He ate with appetite, and slept quietly enough. One day he came to me, complaining of a painful swelling in each groin, but more on one side than the other. On examining I found the spermatic cord very much enlarged. I asked him if he had taken liberties with women ; he declared, on his honour, that he had never had connection with any one, for fear of the venereal disease ; but that he had often been incommoded in the same way before, and that he felt it wherever he was in company with women, who strongly excited his desires ; that

it sometimes became very painful, and forced him to avoid such occasions as much as possible. Having been in such a situation the day before, he had felt the same pain; but it had continued longer than usual, and to such a degree as to force him to consult me. I advised him to apply cold water on the parts, which relieved him in a few days. These are the preliminaries I thought proper to mention.

Some months after, he complained that one of his testicles was become very hard without any apparent cause. I questioned him about women, when he repeated what he had said before, but acknowledged he had frequently masturbated himself, without thinking that it could do any harm. I prescribed hemlock, and all the resolvents of the *Materia Medica* with which I was acquainted, both internally and externally, but without any effect. The testicle became painful and larger from day to day. At length the tumour burst, and rendered a small quantity of purulent matter. On my return to the town, after an absence of some months, the patient informed me, that during all that time a small evacuation had gone on, and that every day little bits like white filaments came out of the ulcer. On examining, I found the testicle reduced to the size of a little nut, and the ulcer almost entirely closed. In fact, in a few weeks it was entirely cicatrised. The cough, however, had always continued; but he did not seem thinner than when he came to me

the first time. Every three or four months, when the tickling of the cough seemed to increase, and he was afraid of spitting blood, he got himself bled. The spermatic cords on both sides were in the natural state.

In the same month of the following year, the other testicle was affected precisely like the first. A surgeon of the first eminence, who had attended him with me the year before, was called in during my absence. But though all the remedies had been given that I should have prescribed myself, I found, on my arrival, that the disorder continued, and had already lasted six weeks. At the end of the seventh week, the testicle burst, when entire pieces of the spermatic vessels of the testicle came out daily by the opening. In three months, the testicle was reduced to the same size as the other. There was no swelling in the spermatic cord; and the patient told me he had strictly followed my advice, and had renounced, for the two last years, the bad habit I have mentioned. The cough continued, undermined him gradually, and he died two years after.

The last physician who attended him informed me, that on opening the body, he had found a *vomica* in one of the lungs, and many tubercles or large hard tumours in both. But he did not examine the testicles. I do not pretend to determine the cause of this affection of the testicles; if produced by the scrophulous disease, or as an effect of masturbation. But I

have simply related this history as a particular and remarkable observation, which shows that the testicles may sometimes come to a suppuration, notwithstanding the most attentive and methodical treatment.

Of the Cancer of the Testicles.

In cases where the induration of the testicle is neglected, or resists all remedies, it sometimes becomes painful, and assumes, in time, a carcinomatous character. This must be remedied directly by the extirpation of the testicle; but, before this operation is undertaken, we must always examine with care, if the lymphatic vessels of the spermatic cord are not attacked at the same time. In this case, the extirpation is a useless operation, and which by its fatal consequences only risks the reputation of the surgeon; several dissections we have made in London having demonstrated, that in these circumstances, the kidney of the same side, in which the lymphatic vessels of the affected testicle terminate, is also commonly affected, and thus the disease is become incurable.

CHAPTER VI.

OF THE OPHTHALMIA, OR INFLAMMATION OF THE EYES, AND OF THE DEAFNESS PRODUCED BY THE SUPPRESSION OF A SYPHILITIC BLENNORRHAGIA.

THERE are three distinct species of syphilitic ophthalmia. The first and second deriving their origin from blennorrhagia, belong to this sixth chapter. The third, produced by the syphilitic virus spread through the system, will find its place in the second volume of this work.

I shall begin by speaking here of the first, which is the most acute, most violent, and most dangerous of all the ophthalmias I know.

I have several times seen this terrible disease ; but fortunately, never in any patient of mine. All the practitioners with whom I have conferred on this frightful complaint, and who have had occasion to see it several times, were of opinion, that it owed its origin to a virulent gonorrhœa, suppressed or driven in, as they said, by the way of metastasis.

This disorder happens much more rarely to women, though I have seen several examples of

it for some years past. Judging by my own observations, this ophthalmia never appears in men, except when they are attacked with a syphilitic blennorrhagia. For want of a certain number of facts and exact observations on this species of ophthalmia, (for I know no author who has written on it *ex professo*,) I shall transcribe from my journal the most remarkable and instructive points concerning it.

In three cases where I had occasion to see this ophthalmia, it appeared in winter in cold climates, after the patient, labouring under a recent blennorrhagia, or, as it is commonly called, a virulent gonorrhœa, had exposed himself to severe cold in the open air. In two of these cases, both eyes were attacked at once, and suddenly. None of these patients had previously had the smallest complaint in the eyes. In the three cases, the discharge from the urethra was evidently diminished or suppressed from the beginning of the ophthalmia; and at the same time, an evacuation of a puriform matter of a greenish-yellow colour, like that of a blennorrhagia, with dreadful pains, that became insupportable on the least contact of light, issued from the eyes. As far as I could distinguish, in the instant of examination, which the pain would not allow me to prolong, the same matter which discharged from the eyes appeared to be extravasated in the whole anterior chamber of the eye, and, as it were, infiltrated between the laminæ of the transparent cornea. All the re-

medies employed in this were ineffectual, and the disease terminated by blindness.

The last patient was a young man twenty-nine years of age, who was a captain in the army. He was ordered to mount guard at court, in the month of January, while he was afflicted with a violent blennorrhagia. Unfortunately the day was excessively cold, and he was forced by his duty, to remain a long time exposed to the air during the day and night. Towards midnight he began to feel the most violent pain in both eyes at once, which very soon increased to such a degree that he could not endure any kind of light. The next day, this accident was attended by a discharge of puriform matter from both eyes. On inspection, the albuginea appeared very much inflamed and swelled. A physician was sent to him, unfortunately very ignorant, who ordered general remedies, as bleeding, purgatives, &c. with a fomentation of hemlock. The third day, on examining things more closely, the cornea was found completely opaque and a *hypopyon* formed; there appeared no ulceration. The hemlock was continued, and, as may easily be imagined, without any effect. Ten or twelve days after, the inflammation began to abate, and the discharge from the eyes stopped; but the cornea did not recover its transparency: on the contrary it was extremely thickened, and the patient remained entirely blind for life. I plainly saw in this patient

the arteries of the transparent cornea, coming from the albuginea, inflamed, and as full of red blood, as if they had been injected like an anatomical preparation; and they were still in this state in the fifth week of the disease when I saw the patient for the last time.

In none of these ophthalmias, was an incision of the cornea attempted, nor any means to restore the discharge from the urethra. They are however the two principal means from which I should expect any real relief in such an ophthalmia, not omitting also the internal use of mercury, especially the oxymuriate, together with local and general evacuations by bleeding, purging, leeches, and blisters, the suppuration from which should be kept up. The incision of the cornea to evacuate the extravasated matter should be made in the beginning of the complaint.

When the inflammatory symptoms are dispelled, there remains, after these ophthalmias, in that portion of the conjunctiva which covers the cornea, an opacity which is improperly called *pterygium* or *pannus*. Besides the opacity of this external lamina of the cornea, the cornea itself often becomes opaque. There is in this case no excrescence to extirpate; but the efforts of the practitioner should tend, as Professor RICHTER, of *Gottingen*, has very judiciously observed, to restore the pellucidity or lost transparency. This disease, properly called *leucoma*, is owing to stagnant and thick-

ened humours, which must be dissipated, if the disease be recent, not by internal remedies, but rather by topics, as the submuriate of mercury, borax, volatile alkali, &c. If the disease is inveterate, these remedies will produce but little effect; and the surgical operation itself would be useless if the cornea is also opaque. If the conjunctiva, which covers the cornea and forms its external lamina, is alone affected, after having employed the above remedies, the excision should certainly be tried. For this purpose, a circular incision must be made round the limbus or edge of the cornea, whether the conjunctiva be in a state of tension or relaxation. This incision will be followed, in a few days, by the exfoliation of the conjunctiva. If the patient can distinguish the light before the operation, there is more hope of success.

I proceed to the examination of the second species of syphilitic ophthalmia mentioned above. It is a chronic inflammation of the eyes, especially the eye-lids, attended very often with little ulcers of the sebaceous glands, with an oozing of a thick yellowish matter, described by authors by the name of *Psorophthalmia*. I have met with many of these ophthalmias in the course of my practice. In the beginning, not knowing the source of them, I was distressed to find that I was employing the best antiophthalmic remedies without success :

however, instead of attributing this to the inefficacy of the remedies, as most physicians and surgeons do when they do not succeed, I preferred attributing it to my ignorance of the real nature of the disorder. I soon had occasion to find that I was not mistaken.

A young man in London came to consult me for an ophthalmia of this kind. After having tried the best remedies internal and external that I knew of without effect, he left me. I heard nothing more of him for two months, when he came one day to consult me for a syphilitic blennorrhagia. He told me he had consulted during his absence several practitioners on his ophthalmia, but with no more success than me; but having caught a blennorrhagia eight days since, he had begun to feel better in his eyes from the third day of the discharge, and that the ophthalmia diminishing from day to day, he was at that moment quite cured of it. Asking him if he had never had a gonorrhœa before, he said he had had one some time before he came to consult me first about his eyes; that he had suffered much and for a long time with it, but that at last the discharge had disappeared; that he had not mentioned it, as he had not supposed there was any connection between that gonorrhœa and the complaint in his eyes, which had come on several weeks after.

This fact was too striking a lesson for me,

ever to forget it. Consequently I have never since failed, in a similar case of ophthalmia, to ask if the patient has not previously had a blennorrhagia, and if it has been properly treated and cured. In all cases, especially when patients tell me they have tried many internal and external remedies for suspicious ophthalmias, I do not hesitate to advise the application of bougies for a couple of hours a day, as the surest and speediest way of curing the psor-ophthalmia; and I have had the satisfaction to see most of them cured even without any other external application. I find a case perfectly similar, in a small treatise on ophthalmia by Dr. *Lange*, which deserves a place here. A butcher went to the hospital at *Buda* (capital of Hungary) for advice respecting a violent inflammation of both eyes: professor *Plenck*, on examining the patient, found that this ophthalmia proceeded from a recent blennorrhagia that had been badly treated and suppressed; and he proposed the inoculation of the blennorrhagia, in order to restore the discharge from the urethra. The patient understanding this, said if that was all, he would soon find the remedy; went off, and returned eight days afterwards, perfectly cured of his ophthalmia, to ask advice for a gonorrhœa which he had got, he said, from the same woman who gave him the other.

I have observed several other ophthalmias

and ulcers on the eye-lids, nostrils, and lips, probably caused by a want of cleanliness and attention, when patients put their hands to their face after having touched the parts affected with a blennorrhagia or syphilitic ulcers. A case communicated to me by a practitioner of my acquaintance confirms this suspicion. A man accustomed to wash his eyes with his urine, did it one day after an impure coition, without thinking of the consequences; but the result of this inattention was a most terrible ophthalmia.

Of Cophosis, or the Deafness produced by a Suppression of the Syphilitic Blennorrhagia.

I have only met with a single case in my practice of complete deafness after a syphilitic blennorrhagia, which was suppressed the thirteenth day by the internal use of turpentine. The patient was a robust man, twenty-six years old; had no chancre in the genitals, nor had ever had the least syphilitic symptom: it was the first time in his life, he assured me, he had ever been infected. A mercurial course dispelled this deafness.

Some authors say they have observed an inflammation with a discharge of puriform matter from the ears, produced by the suppression of a syphilitic blennorrhagia. I should not

hesitate to recommend in obstinate cases of an affection of these organs, the same remedy as for ophthalmias produced by the same cause, I mean the application of bougies to restore the discharge from the urethra.

CHAPTER VII.

OF THE SWELLING OF THE KNEE (*GONORREUS*)
DURING, OR AFTER, A SYPHILITIC BLENNOR-
RHAGIA.

DURING or after a blennorrhagia in men, there is sometimes a very considerable swelling of the knee, (sometimes of both knees and the calcaneum at the same time,) attended with pains in the joint often very violent. These pains, joined sometimes with a symptomatic fever, more or less violent, last from fifteen to twenty days, and dissipating by degrees, leave behind them an immobility of the joint which lasts for several months.

This disease particularly affects young men, who, after a debauch with wine or women, have caught a blennorrhagia, with which it seems intimately connected.*

It is astonishing that no author has spoken of this disease as a consequence or symptom of

* What the English call a *white swelling* is a species of this disease. The seat of it is in the bursæ mucosæ above the articulation of the knee. It would be desirable to ascertain if these blennorrhagias are not rather arthritic than syphilitic.

blennorrhagia. It is not, however, very rare; for I have seen several examples of it in the course of my practice, each of which came on from the eighth to the sixteenth day of the blennorrhagia; and in all these cases, the discharge from the urethra had sensibly abated, or even been entirely suppressed.

I do not dare to decide on the character of this complaint, for want of sufficient observations; but in all the cases that have come to my knowledge, it seemed to partake of the gouty character, excepting that the patients were all from twenty-three to thirty years old, that the colour of the skin was not changed, and that the swelling could be touched without seeming to give much more pain to the patient.

This swelling dissipates gradually by the internal use of much mild and diluting drink, and externally by frictions with the ammoniacal liniment, but above all with a liquid ointment made with the gum-resin ammoniac, dissolved in vinegar of squills. In other cases, it is necessary to apply frictions with the submuriate of mercury and saliva on the knee, or even to administer a complete mercurial course.

CHAPTER VIII.

OF THE PHIMOSIS AND PARAPHIMOSIS.

THE word *phimosis*, which comes from the Greek *φίμω*, *præcludo*, *obturo*, indicates that state in which the prepuce is so contracted, that it cannot be drawn back to discover the glans.

There are many men in Europe, who have the prepuce naturally so strait, that it cannot be drawn back enough to uncover the glans: this is the *phimosis connata* of nosologists, which I do not treat of here.

The disease in question is an inflammation of the membranes which compose the prepuce, attended with tumour, redness, and heat of the part, and produced by the syphilitic virus or some other acrimony between the glans and the prepuce, or infiltrated between the membranes which form the prepuce. It is most commonly the consequence of ulcers in the interior of the prepuce, or else of a blennorrhagia of the glans.

Men, whose prepuce is naturally strait, or whose *frænum* is too short or tight, are the

most subject to this complaint. All persons who are circumcised are exempt from it.

It has been recommended in this case, to perform the incision of the prepuce directly, and thus to uncover the parts, in order to apply suitable remedies, and prevent buboes, or the enlargement of ulcers, if there are any. This operation is sometimes absolutely necessary; but I am by no means of opinion, that it should be done lightly and without strong reasons; for there are cases, where very obstinate fungous excrescences are formed in the wound of the incision, and of worse consequence than the primitive complaint. Moreover, the wound, by exposing a new and larger surface for the absorption of the virus, must expose the patient still more to the dreaded danger of a bubo or general syphilis. It is therefore better, in many cases, to obviate these bad consequences by topical applications, principally by injections between the glans and prepuce. If that, however, is impracticable, or very violent symptoms appear, or livid spots under the prepuce, the operation must be performed for fear of a greater evil, the mortification of the part.

To ascertain if there is an ulcer between the glans and prepuce, I introduce a stilet, to which a little lint is fixed, and turn it all round the glans. If there is an ulcer, the patient commonly feels pain, as soon as the stilet and lint touch it; and on withdrawing them I find the lint stained on one side with purulent matter;

while, if there is only a blennorrhagia of the glans without ulcer, there is no particular pain in any part of the glans, and all the lint is equally stained.

In cases, where the symptoms of inflammation are very considerable, especially when attended with ulcers, it is useful to make local bleedings, principally by means of leeches. In less violent cases, it is sufficient to apply a cataplasm made of crum of bread and water with a little acetate of lead. According to circumstances, I introduce mercurial ointment, or I inject three or four times a day, between the prepuce and glans, either a solution of nitrate or oxymuriate of mercury in water, or the injection *ad phimosin*. (See Ph. Syph.) I manage so that the space between the prepuce and glans is filled and distended by the injection. If there is an ulcer, lint steeped in the same lotions may be properly applied, once or twice a day, by means of a stilet; mercurial fumigations are also very useful in these cases. I think there is never any danger of the parts growing together, as long as the ulcers are in a state of irritation; and when they have changed their nature, the phimosis is commonly dissipated so much, that the prepuce can be drawn back. Mercurial remedies must never be omitted at the end of this disease.

The prepuce sometimes acquires an enormous size in a phimosis, and even forms fungous or condylomatous excrescences. This accident is

often taken by less skilful practitioners for a cancer, and the amputation of the penis is recommended. I think it very imprudent to advise or perform this operation without the last necessity; for the complaint is cured, as I have often observed, by a nourishing regimen, strengthening medicines, and the external application of the lotion *liquor ad condylomata*, or the phagedenic water. (See Ph. Syph.)

The great swelling of the prepuce, which sometimes subsists after the most violent symptoms are abated, often yields to local frictions of mercury and the steam of warm water; sometimes to spirituous fomentations, taking care at the same time to keep the penis always tied upwards. In the most obstinate cases, the external use of hemlock or mercurial fumigations are of great assistance; but it is sometimes necessary to cut off a part of the prepuce.

Of the Paraphimosis.

The *paraphimosis*, a word derived from the Greek *φίμωσις* and *παρά*, *præclusio*, is a disease, in which the prepuce, being drawn behind the glans, is contracted on it like a ring, so that it cannot be drawn forwards on the glans. It might be named, with more precision, a *strangulation of the glans*.

In phimosis, the prepuce is the part principally affected ; in paraphimosis, it is the glans which suffers, and which require the most immediate attention. This last disease is consequently more dangerous.

Men, who naturally have the orifice of the prepuce strait, are the most subject to this disease, which owes its origin either to a great tumefaction of the glans, as happens sometimes in blennorrhagias, or to a violent irritation from ulcers. This disease was well known to the ancients ; and I have but little to add to what may be found on the subject in Celsus.

I shall only observe, that the greatest danger in this complaint is a mortification of the glans. I once saw a gangrene come on after such a strangulation, before the surgeon had time to arrive. Consequently, not a moment must be lost in these cases, and the greatest efforts must be made to draw the prepuce over the glans, by disgorging the latter, or cutting the former.

The most efficacious remedy for disgorging or diminishing the swelling of the glans, is the solution of acetate of lead in water, which is carefully applied cold, at the same time pressing the glans gently with the fingers, and avoiding to wet the prepuce with the lotion. The effect of this remedy is so powerful, that the swelling of the glans is often reduced in a short time so much, that the prepuce can easily be

brought forward, and this dangerous complaint thus be quickly removed. If this remedy be not at hand, cold water may be thrown repeatedly on the glans, or the part be gently pressed with the fingers, which must be dipped from time to time in cold water, in order that, by these means, the blood may be re-absorbed, which is accumulated in its cavernous substance.

These are the most efficacious means to diminish the swelling; and with address and patience, by pushing the glans gently backwards, while with the other hand, we attempt to draw the prepuce forwards, we may very often succeed, and deliver the patient from imminent danger. Ice or iced water is useful for this purpose to the person who operates. If the disease is attended with a syphilitic blennorrhagia, it might be objected that circumcision is necessary with respect to cold, for fear of causing a repulsion; but the degree of present danger must determine us to risk rather *remedium anceps quam nullum*. Local bleedings likewise often produce excellent effects. If the paraphimosis cannot be soon reduced, and the symptoms are violent, an incision in the prepuce or frænum must not be deferred; an operation by no means dangerous, and which becomes absolutely necessary to prevent one of the worst accidents of this disease, a mortification of the glans. If there

are ulcers on one side, I always prefer making the incision of the frænum or prepuce on the opposite side, in order to secure the wound from the impression of the virus as much as possible, and to hinder its absorption by the lymphatic vessels of this new sore.

CHAPTER IX.

OF THE CANCER, AND THE ROTTENNESS OR GANGRENE OF THE PENIS, AND OF THE AMPUTATION OF THAT PART.

THERE is hardly any author who has written well on this subject. Two cases in particular occur in practice, which require the amputation or excision of the penis; the first, when the part is attacked by a phagedenic ulcer, which from its progress threatens the life of the patient, or by a truly carcinomatous ulcer; secondly, when it rots or falls into a mortification. Both are at present seldom the consequence of the immediate action of the venereal virus.

The *phagedenic ulcers* of this part commonly arise from bad treatment, often by touching venereal ulcers repeatedly with caustic; sometimes from the access of air, and still more frequently, by continuing the internal use of mercury too long for ulcers, which from venereal have become mercurial ulcers; but such ulcers do sometimes proceed from the herpetic virus, or the truly carcinomatous virus, applied to the part during coition, and perhaps also from divers other acrimonies, the nature of which is not well known

to us. The case of the hermit Heron, which I have mentioned in chap. i. belongs to this class. Pliny the younger mentions a Roman who attempted to drown himself with his wife, on account of a similar complaint. The black disease, which appeared some years ago at Boston, and other parts of North America, and in which the penis mortified, which I have mentioned in the same chapter, is also another example.

The character of these ulcers consists in their making a very rapid progress, their edges become hard and reversed, the suppuration is copious, ichorous, and very fetid, with sharp shooting pains. The part being very much swelled, and compressing the orifice of the urethra, particularly when the disease is neglected, occasions the urine frequently to form other passages, and thus keeping up the irritation in the parts affected, makes the disease worse, or renders it incurable.

The *mortification* or rottenness of the penis owes its origin to very different causes: 1°. to a violent strangulation of the glans in paraphimosis. 2°. To the infiltration of the urine into the *corpora cavernosa* of that part, and in some cases to the retention of urine or a urethral ischury. 3°. Gangrene sometimes affects the penis in the progress of a violent inflammation. 4°. It has been observed, that when a man already affected with blennorrhagia is attacked, particularly in hospitals, with that fever, accompanied with general weakness of the body, commonly called *putrid fever*, the penis sometimes mortifies,

and in this case falls off of itself. Hippocrates had observed, that the same disease sometimes falls on the testicles, by a species of metastasis in fevers of a bad character. It may also perhaps sometimes proceed from elephantiasis, or the black leprosy.

As to the treatment of phagedenic ulcers, I must refer the reader to chap. xi.; but when the organic structure of the penis is so much altered or destroyed that there is no hope of saving it, or when the complaint makes such rapid or violent progress that there is reason to fear that the disease may communicate to the neighbouring and internal parts, and that by its successive progress, the patient may lose his life, in such circumstances, amputation or excision becomes necessary.

In cases where gangrene appears on the penis, the cause, if possible, must above all be destroyed, and the most powerful remedies, both external and internal, must be employed to arrest its progress. If the gangrene is stopped by these remedies, or of itself, nature often separates the dead part from the living, without any assistance from art; but if it continues to communicate itself to the healthy parts, and evidently increases, amputation may save the life of the patient, and should be adopted immediately without delay or hesitation.

Boyer has given the best description of the manner of performing this operation, in the second volume of "*La Médecine éclairée par les*

sciences physiques.” I shall transcribe it word for word.

The Amputation or Excision of the Penis.

“ After having surrounded the swelling with a piece of linen, I held it with the left hand, drawing the skin a little towards me, and I then cut with one stroke of the bistoury, the skin, the corpora cavernosa, and the urethra. I pinched the arteries which run on the back of the penis with dissection pincettes, and drawing them towards me had the ligature formed. I did the same with the arteries which run in the middle of the spongy tissue of the corpus cavernosum. After having made the ligature of these vessels, I introduced a sound in the form of an S into the bladder. I applied lint to the wound, and supported it with long compresses, open in the middle to let the sound pass, and placed sideways. The ends of these compresses were covered above the heads of a bandagé in T, to which the sound was also fixed with little strings. These were the principal parts of the apparatus. I must remark, that the ligatures of the arteries fell off on the tenth day after the operation, and that the suppuration was then as well established as it could be; the sound was left in the bladder to the end of the cure, with the précaution only of taking it out from time to time to clean it, but it was immediately replaced. The wound was

entirely cicatrised in forty-five days, and the patient left the hospital perfectly cured.

“ It must be observed, that with respect to the sound or catheter which is put into the urethra, to facilitate the application of the apparatus and the passage of the urine, and to prevent the urethra from closing; *Ledran* advises it to be removed when the sore suppurates, and to be replaced when the cicatrix is forming, to hinder the urethra from closing too much; but I think it is useful to leave it till the end of the cure, to prevent the urine from wetting the sore, which retards its healing.

“ In case of gangrene, the ligature of the vessels may sometimes be dispensed with; but if their diameter be ever so little increased, as is always observed in carcinomatous tumours, a ligature is to be preferred, and is the best means of preventing a dangerous hemorrhage. The arteries which must be tied are those on the membrane of the corpora cavèrnosa, called the dorsal arteries of the penis, and those which follow the direction of the middle of the spongy substance of the corpus spongiosum. These arteries may almost always be tied by drawing them out with pincers, but if this cannot be managed they must be sewed with a needle.

“ I shall conclude by remarking, that the precept which *Ledran* gives of cutting a greater portion of the skin of the penis than of the corpora cavernosa, deserves the greatest attention, because the omission renders the ligature of the

vessels very difficult, on account of the retraction of the corpora cavernosa towards the pubis, so that the skin may project over the extremity of those bodies, and hinder the uncovering the vessels.

“ The fear of hemorrhage has often prevented this operation, and is no doubt the reason why Heister and Bertrandi prefer the ligature of the penis ; astringents also have been advised, or even the application of the actual cautery, after the amputation : but it seems to me, that it is the compression or ligature of the vessels which must be employed according to the distinction I have made. Compression generally suffices, when the operation is performed in consequence of gangrene, because then the diameter of the vessels is not increased. To make this compression, a sound is first fixed in the bladder, and then little rollers of lint are put on the wound ; when a sufficient quantity of lint is put on, little compresses are placed across, the extremities of which are fastened under the heads of the bandage in T, after which the extremities of these compresses are reversed one towards the other, and are attached with pins. This simple method is preferable to the very artificial compression proposed by Salucci.”

CHAPTER X.

OF THE URETHRAL ISCHURIA AND DYSURIA.

A SUPPRESSION or total retention of the urine is called *ischuria*, (from the Greek word *ισχυρία*, from *ισχω*, *retineo*, and *ούρον*, *urina*,) and the name of *Dysuria* is given to a partial suppression of urine, or to a frequent desire of making water with a greater or less difficulty in passing it, or doing it in a continued natural stream (from the Greek word *δυσῆρία*, *difficilis et molesta urinæ excretio*). When the seat and cause of either of these complaints is in the urethra, the word *urethral* is added; and *Ischuria urethralis*, or *Dysuria urethralis*, is said to distinguish them from those which have their seat in the bladder, the ureters, or the kidneys; and which are then called *Ischuria vesiculis*, *ureterica*, *renalis*. By adding the word *syphilitic*, those are especially marked which owe their origin to the venereal virus, whether recent or old.

In this chapter, we treat principally of the partial or total retention of urine arising from a disease in the canal of the urethra.

Both these complaints seem to have been

unfrequent or unknown among the ancients.* In fact we find in no Greek or Latin author much concerning the complaints of the urethra, now so frequent in Europe, and other parts. Nevertheless the Greeks were acquainted with the *catheter*, which Celsus calls *fistula ahenia*, or metallic sound, which was used in his time in retentions of urine.

The ischuria or total retention of urine is an acute disease, often very dangerous and even fatal, and which requires immediate assistance. The dysuria, or partial retention, on the contrary, is generally a chronic disease.

The immediate causes of both are, 1°. a violent inflammation in some part of the urethra, or neck of the bladder; 2°. a spasmodic con-

* Isocrates, in his *Panathenaicon*, says, towards the end of that discourse "I undertook this work at the age of 94, and had composed the half of it, when I was attacked with a disorder which decency forbids me to name; a disorder which may carry off the most robust person in two or three days, and still more such an old man. I have struggled three years against it, and have shown so much courage, that those who came to see me, or who heard of it, admired my patience. At last I have decided, though near my hundredth year, and moreover very infirm, to put an end to it."—What this complaint was has been the subject of much discussion, and nobody I have met with has ever given me a satisfactory account of it; but after much reflection, I think it must have been an ischuria or a total or partial suppression of urine; but we cannot tell if it was caused by a disease of the urethra, of the prostate gland, or of the bladder.

traction in the same parts; 3°. a compression of the neck of the bladder, or the cavity of the urethra, caused by a swelling or scirrhus of the prostate, or any other gland of the urethra; 4°. a contracting cicatrice from a former wound or ulcer; 5°. a warty or fungous excrescence in the cavity of the urethra, commonly known by the name of a caruncula, or carnosity; 6°. a chronic contraction or stricture in one or more parts of the canal, produced by a thickening of the membranous or spongy substance of it.

Dysuria as well as *tenesmus* sometimes proceed from a carcinomatous ulcer in the womb or in the rectum; in which case, the only means of relieving the patient is by warm or vapour baths, and frequent injections with a decoction of *solanum nigrum* and opium or poppy-heads in large doses.

The two first causes generally proceed from the venereal virus actually present in the urethra, and are the consequences of a suppressed blennorrhagia, or syphilitic ulcers in the urethra. The others are commonly the melancholy, though late effects of a bad treatment of blennorrhagias, by acrid, stimulant, astringent injections; and it is probably in part the abuse of injections in modern times, which has rendered these complaints so frequent in Europe at present.

As the radical cure of these complaints depends on a thorough acquaintance with these causes, we shall consider them more in detail.

Whenever the running of a venereal blennorrhagia is stopped by any cause whatever, the virus seems to penetrate further into the canal of the urethra, and excites an irritation or inflammation analogous to what it had excited in its primitive seat in the fossa navicularis, &c. If it fixes on the *veru montanum*, and irritates the orifices of the excretory ducts of the semen; it produces a swelling of the *vasa deferentia* and *epididymis*, commonly called a swelled testicle. If it penetrates still farther into the urethra, and fixes near its extremity, it does not then produce a swelling of the epididymis, but causes immediately an irritation, a spasmodic constriction, or violent inflammation of the neck of the bladder, very frequently accompanied with a total retention of urine. Some authors attribute all these symptoms merely to a sympathetic affection of the posterior with the anterior parts of the urethra; and consequently deny any translation of the virus from one part of the urethra to the other. I will not decide the point, but the effects are the same in either supposition.

In other cases, the irritation or inflammation produced by the acrimony of the virus or other circumstances, is so violent, that, in whatever part of the urethra it may be, it causes an ulcer, or produces a tumour in some gland of the urethra. This ulcer or tumour, by cicatrising or augmenting, cause a stricture in one or more parts of the urethra, which first impede the urine, and finally, sooner or later, intercept it entirely.

The cicatrix, or swelled gland, forms a knot or protuberance in the passage; and sometimes ulcers in healing may form tuberculous excrescences, which under the name of carnosity or caruncle produce the same effect.

When the prostate gland is particularly affected, it forms a hard tumour, or fungous excrescence, which projects into the urethra or neck of the bladder, and thus produces an *obliteration*, at first partial, and by degrees total, of the cavity of the canal. Anatomical dissections have also taught us, that two ulcers, opposite each other, or even one occupying a great part of the cavity of the canal, by coming near each other, sometimes form bands which cross the urethra; and while a part remains open, with a running, the upper parts engrafted, as it were, together, diminish or close the cavity, and thus prevent the free passage of the urine. But the most frequent cause of our present dysuria is a chronic contraction of the urethra, produced by a thickening and callosity of its membranes.

These strictures commonly take place in only one part of the urethra, but some times in two and even three different parts at once. They are either simple, or complicated with an ulcer; and in this case there is always at the same time a running mixed with pus and purulent matter.

In most of the chronic cases of this nature, the patient makes water freely enough while he leads a sober and quiet life, though he is obliged to do it oftener than natural, the stream is bifur-

cated, or is smaller, and the patient requires much more time to evacuate the urine; and thus the complaint continues for months and even years without much inconvenience. But, either by age, high living, excess in drinking, violent exercise, or long journeys, particularly in winter, when the north-east wind blows, the disease evidently grows worse; the urine only comes by drops, or little broken streams, with inexpressible pain; or else the passage is entirely stopped, and the patient's life is in imminent danger. In this case, if the seat of the complaint is in the curvature of the penis, or lower at the *veru montanum*, the urine accumulated behind the contracted part; often forms a bag, and finally, from its acrimony, produces an abscess, which ends in a fistula in the perinæum, or forms sinuses or fistulæ in the scrotum and rectum. Sometimes also a suppuration and abscess is formed in the perinæum without the patient's suspecting this complaint to be the cause of it.

In other cases the urine forces a passage, and filters into the corpora cavernosa of the urethra and penis, or into the cellular tissue of the penis, scrotum, abdomen, and other neighbouring parts, swells and inflames them, and produces abscesses, or mortification. But when this mischief takes place further on, and near the prostate gland, the urine, instead of spreading about in this manner, sometimes opens a passage into the rectum, and is evacuated by the anus, or it is absorbed into

the mass of blood, and produces an inflammation of the brain with delirium and speedy death.

The consequences of these contractions of the urethra are, 1°. an inflammation, ulceration, and abscess of Cowper's glands, or of the prostate gland, which spread through the surrounding cellular membrane. 2°. A mortification of all the genital organs. 3°. A thickening sometimes very considerable of the membranes of the bladder. From the extraordinary efforts of contraction which the bladder is forced to make, to overcome the opposition to the flow of the urine through the urethra, it becomes, especially if the complaint be of some standing, affected and altered in its structure; it becomes more irritable; its contractions are painful, and dissection shows its whole substance to be greatly thickened; all these effects are owing to the resistance caused by the obstructions in the urethra, as well as to the accumulation and acrimony of the urine. 4°. A bursting or a palsy of the bladder. 5°. A morbid affection of the ureters and kidneys.

The ulcer I have mentioned is generally behind the seat of the stricture. But sometimes it is inclosed in the contracted part, and the stricture by the progress of the ulceration is gradually destroyed, and the complaint thus becomes a simple ulcer.

The strictures of the canal of the urethra (*Stenosis urethræ*) generally proceed from an inflammation excited by the venereal virus or some other acrid or stimulant matter; however they

are sometimes produced by other causes, as gravel, stone, and swelling of the glands of the urethra; but these cases are much more rare; and in fact, there is no mention in ancient authors, nor in those who first described the gonorrhœa, of such obstructions as the cause of ischuria or dysuria.

The late John Hunter says in his *Treatise on Venereal Complaints*, that obstructions of the urethra are never the consequences of an antecedent blennorrhagia. This assertion, which is contradicted by facts and daily experience, probably arose; 1°. from such impediments generally not appearing till a long time after the blennorrhagia has disappeared; 2°. because their seat is commonly not the same as that of the blennorrhagia. I do not pretend to explain how this happens; but it is a fact, that it is only since blennorrhagias have become so frequent, and especially during the last forty or fifty years, that they have been treated by astringent injections, that strictures themselves have become so common in Europe.

Among modern authors, some have maintained that the abuse of venereal pleasures, others that the abuse of wine or spirituous liquors, sometimes occasions scirrhus tumours of the glands, or strictures in the urethra. I do not deny the fact; but I doubt very much if these causes alone, without blennorrhagia or injections, have ever caused these complaints. Neither do I believe,

that scurvy or scrophula, or any other constitutional affection, ever produces them.

However, I shall confine myself in this chapter, to the treatment of strictures in the urethra, which evidently proceed from repeated blennorrhagias, or imprudent injections. I shall only observe here, that similar contractions sometimes take place in the rectum, and in the vagina of women ; but those cases are more rare.

Strictures in the urethra, from the above-mentioned causes, would be seldom dangerous, and never a serious complaint without the retention of urine which is the consequence of it ; for the most alarming symptoms, as irritation, inflammation, ulcer, fistula, and gangrene, which take place between the seat of the stricture and the neck of the bladder, as well as the affection of that organ itself, are the effects of the quantity and quality of the urine accumulated behind the stricture. High living, excessive drinking, violent exercises, coition, and suppressed perspiration, constantly aggravate the symptoms of dysuria, and often put the life of the patient in danger. This danger is proportioned to the degree of obstruction and the irritability of the parts, to the age of the patient, the duration of the disease, and its progressive effects. A small obstruction in the urethra, in a man addicted to high living, often produces a great irritation.

It has lately been a matter of debate, if the urethra is, or ever could be, affected with spasms, since it is wholly deprived of muscular fibres,

and consequently of muscular power. I will not dispute on words; but shall only observe, that when I see in the same patient the urine sometimes flow freely, at others with difficulty, or even totally stopped; when I see that a bougie introduced to the seat of the stricture sometimes passes very well, at other times not till one has waited two or three minutes, and at other times it is absolutely impossible to pass it; that in some cases the stream of water comes out easily, and in others not at all, though in the first the bougie could not be passed, and in the second it was; I am induced to think, that all these symptoms can only be owing to a violent, sudden, partial, and temporary contraction, whatever it may be called. However, it has never been denied that a spasmodic contraction may exist in the acceleratores muscles, as well as in the sphincter of the neck of the bladder.

This complaint is the more dangerous, as the cause which produces it is more difficult to determine and destroy; as the seat of it is deeper in the urethra, and the greater the irritability of the bladder.

To form a good diagnostic of this disorder, and a certain prognostic of its consequences, one must first ascertain if the patient has formerly had one or more blennorrhagias; and in this case, how long they continued, how they were treated, what part of the urethra is principally affected, and how much time has elapsed since the blennorrhagias, and the time when the diffi-

culty of making water began to appear. The actual state of the patient's health, his manner of life, his age, and particular constitution should then be enquired into; whether he be subject to warts in other parts of the body, what remedies he has used for his present complaint, if he can make water, and whether it runs in a stream towards the end of the emission, if it be small or large, simple or bifurcated.

I must also observe, that the physician should not be content with the patient's answers, but should see and ascertain the last fact with his own eyes; he should also ask if the patient can retain his urine long, if he makes a great deal at once, and if his complaint is not attended with a mucous, white, or yellowish running, puriform or really purulent. He should ascertain himself the seat of the complaint, and not trust to the assertions of the patient, who often complains of a pain at the end of the penis, while the cause is very deep in the urethra, or even in the bladder.

When a bougie is employed to ascertain the seat of the complaint, one should observe attentively, what are the difficulties which oppose its passage; if it be stopped in one or more places of the urethra, and particularly where those places are, if it gets as far as the bladder, if it can be drawn out easily, or with difficulty, if when drawn out its surface is dry or moist, or any other impression made upon it, and if the moisture appears on one or more spots. One

should also examine, if besides the obstruction of the urethra, there are not symptoms of the sphincter of the bladder, the bladder itself, or even the kidneys being affected, and if the symptoms of irritation are merely produced by the urine, or rather are not owing to an induration or ulceration of the prostate gland, or to a thickening of the membranes of the bladder, or to some other organic vice of that part.

It sometimes happens, that in consequence of a syphilitic blennorrhagia ill treated, the glands in the fossa navicularis, or at the first bend of the penis, swell, inflame, and suppurate, or harden considerably ; and thus produce an obstacle to the emission of the urine. We must attempt to resolve these tumours in the beginning by emollient cataplasms, or if they are hard and indolent by the application of more powerful resolvents, particularly frictions with the submuriate of mercury by means of the saliva ; repeated once or twice a day.

There are cases, in which one cannot feel the tumefied glands of the urethra, or any indurated part of it, till after the bougie or *catheter* has been applied, and then by this means a great evacuation of urine is procured for once, as also when the complaint proceeds from warts or a fungous excrescence ; but this advantage is only temporary : the bougies must be long continued, and aided by other means.

When there is an organic vice in the bladder, the patient can never retain his urine long enough

to void a great quantity at once. If the bougie or catheter be employed in this case, the quantity will sometimes be very small; while, if the bladder be sound, or only slightly affected, the patient will void a greater quantity at once, provided there be no obstacle or disease either in the ureters or kidneys.

It is important to observe here, that if there is an ulcer in the urethra, in the neck of the bladder, in the bladder itself, in the ureters, or kidneys, the complaint will always be attended with a running of purulent matter along with the urine. In this case, if the bladder or kidneys are affected, when the patient can make water regularly, the pus comes out either mixed with the urine, or alone at the end; while, if the ulcer is in the neck of the bladder, or in the urethra, the pus comes out with the first drops of the urine. The seat of the ulcer in the urethra may then be determined, and often with certainty, by the pain which the patient feels in a particular spot, when the bougie is applied, on which a little matter is often found sticking when it is drawn out.

But whether the ulcer behind the contraction proceed from a violent or ill-treated blennorrhagia, or from the acrimony of the urine, which is retained between the place of the obstruction and the bladder, this disease is always very dangerous; for if not remedied in time, it will end by an abscess or fistula in the perinæum, or by an infiltration of the urine into the cellular mem-

brane of all the surrounding parts, followed by gangrene, and often by death.

Before the urine opens a passage through the perinæum, there commonly appears behind the seat of the stricture, a tumour sometimes red and hard, which frequently increases from the size of a nut to that of an egg, and assumes all the appearances of an abscess. The patient should be speedily informed of the disagreeable consequences which result from such tumours if neglected, and if the bougie cannot be passed directly, the incision must never be long deferred.

When a contraction of the urethra, or hard tumours of the glands appear, especially in men accustomed to excess in drinking, and particularly if they are subject to pimples on the nose; the dysuria is frequently attended with the running of an acrid and ichorous humour, which must be carefully distinguished from a discharge from the prostate gland, which resembles the white of egg, and has a very disagreeable nauseous smell.

It is not uncommon to find patients, otherwise healthy and robust, and in whom the action of the bladder is vigorous, who will not believe it when they are told that they have probably a stricture, or when the application of a bougie is proposed in order to ascertain it.

METHOD OF CURE.

A medical man, called to a patient who is attacked with a total retention of urine, should begin by feeling his pulse. If it is quick and hard, he must be bled. The quantity of blood to be drawn depends on the state of the pulse, and the constitution of the patient. A man of a strong constitution or plethoric habit will bear the loss of a pound of blood, whereas the half will be sufficient in a more delicate temperament. It must be observed, however, that in such cases the patient is more relieved by one copious bleeding than by two or three successive small ones. After the bleeding, or without it, when the general system is not affected, if the bladder be much distended, an instrument must be applied to evacuate the urine. This is sometimes very difficult, and in some cases impossible. It is certain, that this sometimes depends on the cause itself of the complaint; for the difficulty is greater, when the stricture depends on an old complaint of the urethra, than when it proceeds from a suppressed blennorrhagia, or some recent inflammation or irritation of the urethra; however, the success always depends very much on the skill of the surgeon.

Supposing the structure of the urethra to be exactly understood, the following method appears the most likely to facilitate the introduction of the instrument. A general or local

bleeding, when necessary, and according to circumstances a glyster, should always be premised. The instrument, being rubbed with sweet oil, must be introduced gently. As soon as it meets with any obstacle, it must by no means be forced; we must wait a little, and then try again to push it gently forwards, as this obstruction seems to arise sometimes from a momentary spasm, excited by the mechanical irritation of the instrument, which, if one ceases to push, will often go off in a few minutes, and then the instrument enters with more ease; while on the other hand, the spasm becomes more violent, and often renders the introduction impossible. This is probably the reason, why we sometimes see one surgeon succeed, while another equally skilful has attempted it in vain. If the obstacle is at the *veru montanum*, or further up the urethra, it may often be removed by introducing the finger into the anus, or by rubbing the perinæum gently, to help the passage of the catheter. I have seen cases, where the introduction of the catheter was impossible, while the patient remained in bed, but it entered easily when he sat on the edge of the bed with his legs hanging down. Also, that a larger instrument may sometimes be introduced with ease, when a smaller one has been tried repeatedly in vain, and *vice versâ*.

It sometimes happens, that the catheter passes into the bladder, and that the urine does not come, unless the lower part of the belly be gently

pressed at the same time, the bladder having lost its contractility. A great distention sometimes occasions a real paralysis of it. Sometimes a thick mucus, or coagulated blood, will obstruct the orifice of the catheter, which must be removed by injections through the catheter.

I have been minute in the enumeration of all these circumstances, because I am convinced, that by a scrupulous attention to all these points, one may not only save the patient much pain, but, what is perhaps not less important, prevent the disease from infecting the system; which may easily happen, when by mismanagement the urethra is wounded. I have certainly seen the most evident venereal symptoms proceed from such a cause, when the patient had no other complaint but an ischuria, caused by the suppression of a blennorrhagia.

When the danger is not so great, that is, when the bladder is not so much distended, and consequently, the immediate evacuation of the urine is not so pressing, or when a considerable phimosis conceals the orifice of the urethra, or any other cause renders the introduction of the instrument impossible, recourse must be had to other means for evacuating the urine. The following are what I have found the most efficacious.

1°. A common glyster must be given to clear the intestines, and prevent the continual stimulus, which the accumulation of fæces would occasion. 2°. The patient must be placed in a

warm bath, where he must remain an hour, or at least half an hour, and this must be repeated four or five hours after. When there is no convenience for a warm bath, the patient must sit on a close-stool for an hour or half an hour over the vapour of warm water mixed with vinegar. In many cases, I have found this as useful as a bath. 3°. After this, or before, a second small glyster may be given, composed of an equal quantity of barley-water and linseed-oil, with 50 or 60 drops of laudanum, which may be repeated, if necessary. 4°. The perinæum must be rubbed with sweet oil. All diuretic medicines or food must be carefully avoided; and for the same reason, the patient should only drink barley-water, just sufficient to quench his thirst.

In obstinate cases, it will be very proper to try the method of Dr. Hamilton, of Lynn, (described in vol. lxvi. of Phil. Trans. for the year 1766.) This physician found, that a large dose of submuriate of mercury with opium was very useful. He recommends a bolus of ten grains of submuriate of mercury, with two of opium; this dose to be repeated six hours after if the first has not answered, and he was often obliged to give a third dose.

I have had the satisfaction of seeing these different means, when judiciously applied, succeed in several desperate cases.

I once saw in retention of urine, where a catheter could not be had, such a good effect from the application of a roasted onion to the

perinæum, that two hours afterwards the urine flowed abundantly. In another case, the life of a famous army-physician was saved by covering the glans with the fresh pellicle which lies between the shell and the white of an egg, by the advice of an old woman. As soon as the pellicle contracted by drying, the water began to flow in abundance. But two days after, the ischuria having returned unexpectedly the pellicle was again applied, not having a catheter at hand, but in vain, as the woman had predicted; and the patient died.

Perhaps a blister applied to the perinæum would produce the same effect more certainly and more speedily. It has likewise been remarked, that the immersion of the glans in very cold water, by removing the spasm, sometimes made the urine flow abundantly.

John Hunter advises a bougie to be used, and when it will not pass the stricture, to leave it fastened in the penis, close to the stricture: he says the desire of making water returns, and declares, that he has frequently observed, that by then drawing out the bougie, the water flowed abundantly. He says also, that to remove, or even to prevent, this spasmodic contraction, he has found it useful to employ slightly irritating injections, or a bougie three or four inches long covered with some irritating matter, and to leave it in the urethra as long as the patient can endure it. This method has kept off this sort of spasmodic dysuria for several weeks, and

even sometimes cured it. I quote these observations, that they may be used in difficult cases, but have never attempted to verify either of these means myself.

When the practitioner has been fortunate enough to evacuate the bladder, either by the application of the catheter, or by any other means heretofore proposed, the most necessary step to be taken is to prevent a new accumulation of urine, and to remove as soon as possible the cause of the retention. The first may be attained by continuing the same remedies, and especially, as some authors have recommended, by leaving the catheter in the urethra. To this, however, hardly any patient of mine could submit in the beginning. They suffered so much inconvenience from keeping in the catheter, whether of metal or elastic gum, that they were convinced, that the pain, occasioned by the repeated application of it, or by a fresh accumulation of urine in the bladder, could not be greater; and consequently they drew it out themselves, though they had the greatest desire to keep it in. But this inconvenience is not near so great now, since the invention of the elastic gum catheters, which are made at present in several places.

In all ischurias or dysurias from an obstruction in the urethra, the medicated bougies (*cereoli medicati*, Ph. Syph.) or the hollow elastic sounds, are the principal remedies either for relief, or a radical cure. When the obstruction depends on a contraction of the urethra, or thicken-

ing of its membranes, or little excrescences, or ulcers, or a temporary swelling of Morgagni's or Cowper's glands, in all these cases, I think the bougies will always effect a radical cure; for if the smallest bougie has once been got past the stricture, larger ones may be gradually used, till one is passed of the natural size of the urethra, which ought to be continued for a sufficient time.

In cases where the retention is produced by a scirrhus or induration of the glands of the urethra or prostate gland, though the bougies can never effect a radical cure, they render an essential service to the patient by facilitating the evacuation of urine. The metallic catheters, or elastic hollow sounds, are especially useful for this purpose; but if not at hand, the elastic or medicated bougies are a precious resource.

Notwithstanding, I have seen many cases where the bougies, whether medicated or elastic, have produced a radical cure, and have destroyed the excrescences or scirrhus tumours which obstruct the diameter of the urethra. The bougies, which we can use with safety, hardly act but mechanically; the gentlest are the best; and I never saw a single patient who could support the irritating bougies long enough to produce any good effect.

When a metallic catheter or elastic sound is employed, and the patient cannot bear the constant application of it, which happens especially during the first days, it must only be applied

when the bladder is full, and be drawn out when he has made water ; but when he is accustomed to the irritation, which generally happens in a few days, it may be left in for twenty-four or forty-eight hours, when it must be drawn out to be cleaned : but if a hollow sound is not at hand, a bougie may be used in the interim, which is only applied when the bladder is full, and after passing the stricture it is gently withdrawn, the patient being requested to make an effort to urinate. In this manner, the flow of urine follows directly the point of the bougie, and keeps the passage open by impulsion ; but it diminishes as soon as the swelled gland or excrescence, rising again, occupies a part of the cavity, and the operation must be repeated whenever an evacuation is necessary.

The following rules may be useful to the young practitioner in the application of bougies, metallic catheters, or elastic sounds.

The instrument, being wet with sweet oil, is introduced in the ordinary way. The surgeon draws the urèthra gently towards him with one hand, and holding the sound between the fingers of the other, always at the distance of an inch or two from the glans, introduces it by degrees. It often enters the bladder, without any particular direction or turn of the hand in the operator ; but if any resistance occurs, it must be turned gently on its axis between the fingers, and the other rules for facilitating the introduction must be observed, as mentioned above. If

the resistance is in the neck of the bladder; there is often nothing to be done but to lower it forwards with great precaution, and if necessary, by aiding or directing it with the finger towards the anus. If the obstacle be too great, the operation must be suspended till the contraction or spasm of the sphincter ceases, when it will generally enter further, even into the bladder.

When the catheter or sound, supported by the stilette, is drawn out, it must be well cleaned and rinsed before it is used again; but if there is no steel wire, the elastic sound is commonly very soft after having been some time in the urethra, and consequently, cannot be used again till it is cleaned and dried.

Catheters or hollow sounds are cleaned by washing not only the outside, but also rinsing well the inside with water. For this purpose, a long needle with a thick silk thread may be used to clean and dry the inside. If they are too stiff when to be used, they may be softened by holding them in the hand, or near the fire for a moment.

If the stricture is considerable, and no bougie can be passed, all means should be used to pass a catgut-bougie; for that being done, and the difficulty got over, there will be some hope of saving the patient. The smallest catgut must therefore be tried at first, gently, with patience, and yet with a little force. If it cannot pass, it must be left near the obstacle,

and be fixed externally; that it may not change its situation. In this way, in some hours or some days after, it will succeed in passing. When the obstacle is surmounted, it is easily drawn out if necessary; otherwise it is left in some time to swell; and when drawn out another is immediately introduced a little larger. When a thicker catgut can be easily introduced, the ordinary or elastic bougies may be employed.

But if all attempts to introduce a sound or catgut are ineffectual, and there is imminent danger of a rupture or palsy of the bladder, it is absolutely necessary to evacuate the urine as soon as possible. If the seat of the complaint is in a part that may be got at, nothing better can be done than to make an incision in the urethra beyond the stricture. In this case, the urine itself very often produces a tumour in the urethra, between the obstruction and the bladder; which of course is the spot pointed out by nature for the incision. By this means, the urine may be evacuated whenever it is necessary, and the return and dangerous effects of the ischuria will no longer be dreaded. The wound may afterwards be easily dilated by passing the knife across the contraction, and introducing a bougie which the patient must wear till the stricture is removed, and the wound healed. If the stricture is in the neck of the bladder, and the incision cannot be properly made, the bladder may be pierced through the anus, as proposed by *Fleurant*.

Neither operation is very difficult, nor very painful, and is sometimes necessary to save the life of the patient.

Dr. Hamilton tried Fleurant's method, and found it very useful in many cases, as may be seen in the "Philos. Trans." vol. lvi. The bladder is often very prominent towards the rectum, in which case Dr. Hamilton withdrew the instrument immediately after the urine had flowed. He was surprised to see that the urine was retained till the bladder was filled, and then was naturally evacuated by the anus. Fleurant and Pouteau left the canula in the passage; but Dr. Hamilton's observation shows that that is not always necessary.

The puncture of the bladder through the rectum is equally useful, when the ischuria proceeds from an inflammation of the neck of it, or from a tumour of the prostate gland.

If the patient refuses the operation, or there be any other reason against it; if he be lean and the bladder is so distended that it can be felt above the pubis or by the anus, an incision may be made with safety above the *symphysis pubis*, and the bladder may be pierced in that part below the peritoneum; the canula is introduced and left in till the cause of the retention is removed, for fear the urine might filtre into the cellular tissue of the abdomen, and produce accidents worse than the original complaint. The canula must be bent, and be

long enough to reach the posterior part of the bladder, with its convex part.

In cases where all these means have failed, or have been too long delayed, the urine retained will force a passage into the cellular tissue of the penis, scrotum, and adjacent parts; which is frequently followed by gangrene and death.

To prevent, if possible, this catastrophe, the moment the urine appears to have filtered through, incisions must be made in all those parts to let it out; but particularly in the urethra behind the stricture; and even according to circumstances the bladder must be punctured, to give the water a free course by some of these openings, and to prevent or stop the gangrene in the parts where the extravasation has taken place. At the same time, the strongest antiseptic fomentations must be applied on the swelled parts, such as infusions of bark, of the root of the *arnica montana*, &c., in wine or water, with the addition of brandy. The same may be given internally in large doses with opium. If the patient's life is saved, a passage must be attempted through the stricture, a few days after, by the means enumerated above.

It sometimes happens, in fine, that the bladder bursts, and the urine is let into the cavity of the belly, which is always fatal. In other cases, the urine forces a passage into the rectum, and the patient is sometimes saved by it; but at other times, the bladder is so distended as to

lose its contracting power. It then happens either that the sphincter of the neck of the bladder remaining in its natural state, the urine cannot flow; which is the palsy of the bladder (*ischuria vesicalis paralytica*); or the sphincter having lost its contractility, the urine cannot be retained, but comes out drop by drop, as it runs from the ureters into the bladder; a complaint called incontineney of urine, but to which I have given the more appropriate name of *uracrasia*, in my "Systematic Nosology." The first of these complaints requires the catheter, compression of the abdomen, frictions, and aromatic fomentations, to which the acetate of ammonia may be added; and a blister may be applied on the os sacrum. In the second, this last remedy is applied on the perinæum. In either case, cantharides (*Lytta vesicatoria*, Linn.) in powder or tincture may be given with advantage internally.

Such in general are the means of relief in all cases of ischuria arising from a disease in the urethra. But to cure it radically, the cause must be destroyed, which is done by different methods according to its different nature.

If the retention of urine is a consequence of inflammation, or of a spasmodic contraction in the neck of the bladder, produced by the syphilitic virus recently applied to the urethra, or from the suppression of a blennorrhagia, in the first case, the symptoms must be reduced by the remedies pointed out in the first chapter, and, in the second, the discharge must be re-

established by the remedies indicated in the same chapter. I will only observe that the catheter, and vapour of hot water applied to the perinæum with the use of opium, are the most efficacious means. The ammoniacal liniment has sometimes succeeded. The patient must keep quiet in bed, and wear a suspensory; for I have seen cases where the irritation quitting the neck of the bladder, instead of returning to its primitive seat under the frænum, has fixed on the *veru montanum*, and produced a swelled testicle; which I have never observed with this precaution. I think I have seen good effects from warm emollient cataplasms applied round the penis, and the accumulation of fæces must be prevented by glysters.

As soon as the irritation leaves the neck of the bladder and the discharge returns, the disease must be treated like a common blennorrhagia. But the patient must be cautioned to avoid with the greatest care all causes capable of occasioning a similar retention; for we daily see that when it has once happened, it is apt to return again a second time, and often on the slightest occasion.

I must also remark that in such cases, after the ischuria is removed, it is generally necessary to give mercury internally to obtain a radical cure; because an absorption of the virus often happens during a retention, and shows evident marks of its presence in the system, though the local complaint of the genitals is perfectly

healed, of which I have seen many striking examples.

If a partial or total retention of urine proceeds from a chronic affection, as a contraction, callosity, scar or excrescence, simple or attended with an ulcer in the urethra, the general health of the patient, his temperament, age, the degree of the disorder, and the time it has subsisted, his irritability, and manner of life, must be examined with care. All these circumstances require the greatest attention, in order to establish the most suitable regimen and method for curing radically the chief complaint.

But before the treatment of such a disorder is undertaken, the patient should always be informed that the cure will require a considerable time, commonly two or three months, and often more, and that therefore great exactness and perseverance are requisite on his part. I know that most surgeons consider this period as by no means necessary, and that they promise a much speedier cure by leaving the bougie in the urethra for whole days and nights; but I know also that in this way they often produce only an apparent cure, and that the stricture soon returns, and forces the patient to have recourse to a new treatment.

When there are no dangerous symptoms, or the most pressing have been removed, the stricture of the urethra and its causes should be attended to so as to prevent all retention of urine for the future, which is principally done by bougies.

If the patient is of a strong or plethoric constitution, a light diet must be prescribed. If, on the contrary, he is weak and very irritable, it is better to be less rigorous in this respect.

The application of bougies requires particular care and attention. In some cases of dysuria, there is a surprising degree of irritability in the urethra and bladder. The greatest attention, therefore, should be given to the composition, size, and figure, of bougies, and to the manner of using them. The late Dr. Osborn has made a very interesting observation, which proves the utility and even necessity of beginning with such as are softest and most supple. His patient could suffer no common bougie, the irritability of the urethra was so great, that it was feared there was a cancer. But he was cured in six months, by bougies made simply of yellow wax, and he had had the complaint fifteen years. When the patient complains of pain, the bougies are always too irritating, or too large, or ill placed. Bougies smaller than the ordinary diameter of the urethra should always be used first, and larger ones slowly and by degrees. In all cases, the size of the bougie should be relative to the degrees of the stricture of the urethra; at first it should be just large enough to pass with very little effort; and this is gradually increased till the natural diameter of the urethra is restored. If common bougies are used, they should be of the softest kind; and as those of the shops cannot be trusted to, every

practitioner should have them made on purpose. The elastic bougies, or hollow elastic sounds, may also be tried, especially as they now are made so perfect. But, on the other hand, I must say, that there are many cases where a common soft flexible bougie will enter after an elastic one has been tried in vain; and even the patient will often introduce with ease the largest common bougie, while he can neither pass nor keep in an elastic bougie much smaller. This depends on the point of the former being more supple and flexible, and yielding more easily to the different directions of the stricture.

The patient should keep in the bougie for a quarter or half an hour in the beginning; afterwards for a couple of hours morning and evening, but seldom longer.

I have found that this is generally sufficient for a safe and radical cure, though rather slow, and I have long since abandoned entirely the practice of leaving them in for ten or twelve hours, or even all night, as has been generally advised. Besides the inconvenience to the patient by this forced method, it often happens that some weeks or months after the stricture returns, and requires a fresh treatment; whereas by a more gradual plan, such a relapse is not to be feared, and the patient all the time may attend to his affairs as if in perfect health.

If the smallest common or elastic bougie cannot be introduced, the application of a little catgut often succeeds wonderfully. When once

passed, it is left in for some time, or as long as the patient can bear it; it swells by degrees, and thus insensibly enlarges the passage, so that the first time it is drawn out, the patient can often make water with surprising ease; after which a larger one may be introduced, so as to produce a better effect. When the urethra is thus distended, bougies may be used, and continued till the patient is perfectly cured.

The best time for trying the bougie or catgut is in the morning, when the patient is in bed; sometimes it is better to make him sit on the edge of the bed, with his legs hanging down. The bougie must not be left in if it gives too much pain, and the patient often cannot endure it for several days. When introduced, care must be taken to fasten it, lest it should slip into the urethra, of which I have seen sad examples. For that purpose, a thread is fastened to it, and turned twice round the glans rather loose.

If the bougie should unfortunately slip into the urethra, no means must be neglected to draw it out as quick as possible, even by an incision in the urethra; for if left in, it might slip into the bladder, and irritate it to a dangerous degree, or give rise to a calculous deposit, which becoming the nucleus of a stone, might produce death. Too long bougies must also be avoided, that their extremity may not irritate the bottom of the bladder. In general the bougie should not be longer than is necessary to pass the obstruction by an inch or inch

and a half; and its length should never exceed nine or ten inches, which is the usual length of the urethra.

In no case must it ever be pushed with force; for there are many examples of a false passage being made into the corpus spongiosum of the urethra, or even into the rectum, instead of passing through the stricture. Days, and even weeks, are sometimes necessary for overcoming the obstruction, and for introducing the smallest bougie into the bladder. In all cases, the size of them should be suited to the irritability of the patient, and the ease with which he supports them. After the largest has been introduced, and the obstacle is completely removed, the patient should continue them for a month or two; at first for an hour twice a day; then, once a day; every other day, once every four or five days, for some months; and even after, he will do well for a year or two to introduce a bougie occasionally. A general rule is to apply them for an hour or two in the morning, and the same at night. For those who are obliged to go out, or to walk much, it is essential to apply the bougie at night, and try to keep it in for two or three hours together; but never all night, as was formerly advised.

The symptoms which follow their application chiefly in the beginning, as uneasiness, languors, swellings of the testicles, or inguinal glands, with other affections of the urethra, should give

no alarm, as they soon disappear when the patient is accustomed to the use of them.

In general, patients who, from the great irritability of the parts, cannot keep the bougies long in the beginning, bear them more easily in a few days ; however, it is proper to moderate a too great irritability, according to circumstances, by general or local bleeding, warm baths, or local vapour baths, a sedative ointment or fomentation, opiates, glysters, and a proper diet. There are cases where the local cold bath and the internal use of bark are very useful. In all cases the bowels must be kept open, which is best done by castor-oil.

The slight degree of irritation which bougies excite often produces a sort of discharge, which, with the gradual dilatation of the urethra, helps by degrees to destroy the contraction or obstruction. If any hardness should be felt on the outside of the urethra, the action of the bougie would be usefully aided by an emollient cataplasm, or, according to circumstances, by frictions with mercurial ointment, or the submuriate of mercury, or ammoniacal liniment, or, in short, with any other stimulant. Some modern practitioners have recommended a plaster made of the gum-resin elemi, alone or mixed with a little oxide of mercury ; for example, thirty grains of the latter, with half an ounce of the former. This plaster adheres strongly, and by its irritation favours resolution or suppuration ; but it sometimes causes much pain,

and therefore should not be used till some weeks after the patient has been accustomed to the bougies, and then, sometimes only once every second or third night.

By these means, not only strictures and ulcers of the urethra are cured, and the most obstinate blennorrhœas, but often diseases the seat of which bougies cannot reach, as the chronic swelling of the testicles, fistulas in the groin, &c. especially when, according to circumstances, is added the internal use of mercury, with a decoction of sarsaparilla.

When the complaints of the urethra have been thus cured, the patient is still seldom so entirely free, as not to render it necessary to use the bougies again from time to time; and, therefore, whether at home, or abroad, he will do well always to have some of them by him.

A physician is sometimes called when the patient has already tried to use a bougie. In this case, he should ascertain if it has passed the stricture or not, if it passed easily, or required force and time; and in the latter case, if it advanced regularly into the urethra, and overcame not only the stricture, but all the obstacles which might be in the urethra *, or if it

* I cannot pass over in silence a very serious mistake which is often committed by those who apply bougies. I often meet with patients with strictures, for which bougies had been previously used for months together. Making water a little better or with sufficient ease, they are made

passed the obstacle without relieving the dysuria, for then it is probable that there are strictures in several parts, which must be overcome one after the other, or the bougie has formed a false passage, which renders all present attempts useless.

In different cases of this kind, it is right to try the smallest bougies, and in different directions, because it sometimes happens that the passage through the stricture is not in the same direction as the urethra. If a spasm should hinder the passage of the bougie, what we have prescribed in this case must be observed with care. The introduction of the bougie may sometimes be facilitated by rubbing the perinæum with one hand, and pushing gently with the other. To remove the spasm, pouring cold water on the glans may be tried. If the bougie when entered as far as the obstruction falls back when left to itself, it is a certain sign that it has not penetrated the stricture. With ordi-

to believe that they are cured; but are greatly astonished some time after, when they find themselves affected with a new difficulty of making water, and especially when, on introducing a bougie five or six inches into the urethra, I meet with an obstruction, and tell them that they are not cured, and must go through a new treatment. Several have acknowledged, that the bougies with which they thought they had been cured, never went further than the first stricture, and that they never were told that there might be others, or that the bougies should go further, or into the bladder.

nary bougies we may also judge by the change in the point, if it has entered into the stricture.

In some cases, the bougie will pass easily one day and not the next. Sometimes the excretory ducts of the glands of the urethra, or the prostate gland, stop it; its introduction must then be assisted by the finger, and its direction changed. What I have said above of catheters is equally applicable to bougies; a large one will sometimes pass when a small one has been tried in vain.

During the use of bougies, the patient should be very particular in general respecting his food and exercise, and abstain entirely from venereal pleasures.

What I have said respecting the use of bougies for the urethra, is equally applicable to contractions of the vagina in women, and similar contractions in the anus.

If a blennorrhœa remains after the stricture is removed, injections and the other means recommended in chap. iv. must be employed.

When after a hollow sound or catheter has passed, the water does not flow, we must examine if the end of the instrument has really entered the bladder, or if its orifices be not stopped by mucus or clots of blood; in which case, a diluting injection must be thrown into the bladder. If the passage of the catheter is open, we must suspect a palsy of the bladder; it is proper, however, to observe, that the urine does not come sometimes from a defect of its

secretion in the kidneys. In this case, good effects may be obtained from repose in bed, the warm bath, and the internal use of opium in large doses : sometimes, and in certain circumstances, five or six grains of antimonial powder, given internally at night, produce the best effects.

In general it is observed, that all patients affected with an obstruction in the urethra are constantly better in summer than in winter, and during the south or west winds than the north or east. This observation should make us attentive always to keep up the perspiration in all these cases ; and to produce this effect, I know nothing better than the antimonial powder I have just mentioned.

If the stricture arises from a general or partial thickening of the membranes of the urethra stiffer bougies must be employed, and their action must be assisted by mercurial frictions on the urethra. It often happens in this case, that the bougie is not only drawn out with difficulty in the beginning, but moreover is totally dry. While this lasts, it is a bad omen ; but it is a good sign when the bougie comes out covered with mucus, as that indicates that the secreting surface of the urethra begins to resume its action, and perform its natural functions.

If the strictures of the urethra have lasted long, the membranes of the bladder thicken ; and sometimes ulcers are formed by the continual irritation ; the bladder can only retain a small

quantity of urine, and the patient is obliged to make water very frequently. The urine is muddy, in small quantity, has often a disagreeable smell, and deposits much mucous sediment; or else there is a real discharge of pus by the urethra, which comes from the bladder.

The only means of relieving the patient, in this case, is to keep him on a mild regimen, and make him use opiate glysters, while pains are taken to remove the stricture; and an unexpected cure is sometimes effected by time, after the urethra has been freed.

Ledran speaks of a patient whose bladder was much affected, and could only contain a small quantity of urine, who was cured by a decoction of mallow root, injected morning and night. Mr. Jesse Foot has tried it since with success, in several cases; and the injection was administered by means of a sound of elastic gum. He observes, that the state of these patients does not admit of the application of the catheter morning and evening, without the risk of causing an inflammation of the urethra at the neck of the bladder. To avoid this, he advises it to be introduced in the morning and be drawn out at night, after the injection. In making the injection, it must be stopped as soon as the patient feels any pain; as that shows, that the fibres of the bladder are sufficiently distended. The injection is left in the bladder a quarter of an hour or a longer time, according as the patient is pressed to let it out. In a

fortnight, the bladder, which at first could only retain two spoonfuls of the injection, thus recovered by degrees its natural power of retention. To the decoction of mallow he added a decoction of barley and honey, and at the end he used a decoction of barley with vulnerary water. The patient was cured in a month.*

The great point, in all obstructions of the urethra, is to remove them as soon as possible in their origin, and to neglect nothing, though it does not appear serious at the moment. If they become dangerous, incurable, and often fatal, it is to such neglect that these misfortunes must be attributed; and, therefore, patients should be warned of it immediately.

If the size of any gland of the urethra is greatly increased, and resists the treatment pointed out above, I think, if it can be reached, one ought to attempt its extirpation, as the seat of those glands is in the convex part of the urethra. As to the swelling of the prostate gland, see chap. xi.

In cases of retention of urine from excrescences in the urethra, which fortunately are very rare, and which are difficult to ascertain, some ancient authors recommended caustic. This plan, justly neglected or forgotten, has been lately renewed by John Hunter, who even prescribes it in all strictures indifferently, in

* The result of an experiment of this kind may also be seen in a more recent publication on the diseases of the urinary organs, by Mr. Howship.

which he has been followed by his pupil Sir Everard Home; but after the numerous examples of dreadful pain, and even of death, which have followed this application, I conceive, that no surgeon, who is really interested in the health of his patients and his own reputation, would ever use caustic on a spot concealed from view, and so irritable. I need not mention the dangerous effects which might arise from such an imprudent application.

These excrescences or caruncles, however, are much less common than is supposed, and must not be confounded with other protuberances sometimes produced from varices of the veins in the urethra, which practitioners, for a long time, considered always to be excrescences whenever they resisted the introduction of a bougie or sound. More exact anatomical observations have shown this mistake; and though I do not deny their occasional existence, I am certain they are very rare cases, and I have never met with one in my practice in which I could positively affirm the presence of such excrescences in the urethra.

One of the principal things which is most neglected, and to which notwithstanding the greatest attention should be paid in all cases of dysuria, is to warn the patient never to make an effort to expel the urine, but to leave the bladder, whatever time it requires for contracting itself completely and gradually, as it does in a state of health, to evacuate all the liquid it

contains. By forcing the bladder violently by means of the abdominal muscles, to hasten the evacuation, the morbid affection of it is increased, and the cure impeded.

It is of consequence in every dysuria, as well as chronic retention of urine, to examine carefully if there be no tumour formed behind the stricture in the perinæum, or some other part of the urethra. Such a tumour is often attended with much pain, and a very strong symptomatic fever, till the abscess is formed. The patient should be informed of the danger of the erosion of these parts by the urine, and be advised not to defer too long the incision. When there are already one or more abscesses, by which the urine passes, they should all be cut and dilated; but they must be dressed in a very light manner, with dry lint or a bit of sponge.

When the dysuria is complicated with a fistula in the perinæum or its vicinity, and the urine flows in part, or altogether, by one or more fistulous apertures, it would be vain to attempt to cure the fistula before the obstruction in the urethra is removed; when that is done, the fistula often heals of itself, or only requires emollient cataplasms on the perinæum, and a little red oxide of mercury on the edges of the aperture. If the fistula is callous, the callosity must be destroyed by caustic or an operation. Sometimes fistulas resist all these

means, and only heal after a complete mercurial treatment. See *Fistulas*.

In some cases of obstinate urinary fistulas, a cataplasm made with the powder of *digitalis purpurea* has of late been used with advantage.

It is also important to observe here, that there are sometimes fistulas, or a swelling or thickness of the membranes of the perinæum, in consequence of a contusion, or other external violence, by which the canal of the urethra is pressed or pushed aside out of its natural situation, which prevents the introduction of a sound or bougie into the bladder without there being any real stricture in the passage. In these cases the patient often dies, either of a retention of urine, or a laceration of the urethra, and an effusion of the urine into the scrotum and adjoining parts. Such cases have often been taken improperly for real strictures of the urethra; but it has been discovered after death, by taking out the bladder with the penis, disengaged from all the adjoining parts, that the bougie passed then very easily into the bladder, and that there was no stricture. See, on this subject, some very instructive observations by Chevalier, in the *Médecino-Chirurg. Transact.* vol. ii. p. 212.

The same author advises, in similar cases, to make an incision behind the fistula, or induration of the perinæum, into the cavity of the urethra, for procuring a free passage for

the urine. By this means, the irritation of the anterior parts ceases, the tumour diminishes, and the fistula is easily healed; the sound is more easily introduced into the bladder, and the complaint may be by these means radically cured.

CHAPTER XI.

OF THE SWELLING OF THE PROSTATE GLAND.

THE swelling of the prostate gland is a very cruel complaint, but fortunately not common. It is astonishing that the nosologists have not mentioned this disease, while they have made a genus of the swelling of the parotid glands. I have made a genus of it in the second volume of my *Nosologia Methodica*, under the name of *Prostatoncus*, and under this genus I have considered the different species or varieties of the disease by the names of *prostatoncus*, *apostematodes*, *sclerodes*, *scirrhusus*, *carcinomatosus*, *varicosus*, *calculosus* ; for the swelling of the prostate may depend on inflammation, abscesses, stones formed in its substance, a varicose swelling of the vessels which run through it, and the tumour and scirrhus induration of this gland. *Desault* has so well treated these different species of tumours of the prostate gland, that I shall here transcribe what he says of them in the second volume of his *Journal de Chirurgie*. I shall only add a few practical remarks, which may help to relieve or cure more efficaciously this

terrible disorder, and shall begin by observing, that the tumour of the prostate gland differs from other glandular tumours, because it becomes dangerous by its situation, in producing a partial, and by degrees a total retention, of urine, and at the same time a remarkable alteration in the structure of the bladder, which almost always terminates in death.

Though the tumour of the prostate gland is mostly caused by the suppression of a syphilitic blennorrhagia, it sometimes owes its origin to other causes, which are not all sufficiently well known. The case of the late Dr. *Fothergill*, who had never known a woman, and who died, nevertheless, of a retention of urine, caused by a fungous tumour of the prostate, is a striking example.

We shall now quote the author above mentioned on the symptoms and remedies of this disorder.

“ When this accident is produced by the inflammation of the prostate, it declares itself quickly, and proceeds with rapidity. The patient feels at first a sense of heat and weight about the perinæum and anus; and soon complains of a continual beating pain, which he refers to the neck of the bladder. This pain increases when he goes to stool, or makes efforts for that effect; he is tormented with tenesmus, and frequent desire to make water; and always seems to have a large lump of fæces ready to come out of the

rectum. The finger, when introduced into the intestine, feels in the anterior part the projection of the prostate gland. If he attempts to make water, it is long before the first drop comes, and if he makes an effort to accelerate it, he creates a new obstacle by pushing the tumour against the neck of the bladder, the opening of which is then stopped, and he can only make water by suspending this effort. The stream is smaller, and the pain more acute, in proportion to the inflammation of the prostate gland. Another particular sign of this species of retention is, that if a sound be introduced into the bladder, it penetrates easily and without any impediment to the prostate, where it is stopped, and the contact becomes very painful. Moreover, the patient has a hard and quick pulse; he becomes cachectic, and often feels all the symptoms of general inflammation.

“ This species of retention, as well as all those caused by the swelling of the prostate, or other impediments in the urethra, are in general more dangerous in themselves, than those occasioned merely by the weakness of the bladder. In the latter, the rupture of this organ is little to be feared. The canal being free, its sides do not touch so exactly, but that they may be divided by the urine, which after having filled and distended the bladder, press in proportion to their weight, augmented by the re-action of the bladder, and the action of the abdominal muscles. Thus, in these species of retentions, the patient

almost always voids his urine, and passes many years in that state without any serious accident. It is not the same when the cause of the retention consists in a contraction of the canal; for, besides the natural resistance of this canal, the urine has moreover to overcome the obstacles which arise from this contraction, and they often resist more than the coats of the bladder, which have only a certain degree of extensibility beyond which they tear. Moreover, the retention produced by the inflammation of the prostate is more or less dangerous, according as the inflammation is more or less violent and more or less obstinate.

“ The indication in this case is manifest. Resolution, as in inflammation of other parts, being the most favourable termination, all the means of cure should be directed to it; thus bleeding in the arm, leeches on the edge of the anus, baths, emollient glysters, cataplasms of the same kind on the perinæum, are the principal remedies. Antiphlogistic drinks, which in inflammatory diseases are so efficacious, would in this case be rather hurtful than useful; by augmenting the secretion of urine, they would only accelerate and increase the danger. Thus, instead of making the patient drink abundantly, it is better to deceive his thirst, by making him suck slices of orange, or by giving a spoonful of linseed tea, &c., or some other refreshing drink. But however efficacious these means may be, their effect is often too slow, and the danger too urgent to

wait till the urine resumes its natural course of itself. The power of the bladder too is often too much weakened to effect the expulsion. Recourse must then be had to the sound; but the stricture of the portion of the urethra which crosses the prostate, sometimes makes the introduction very difficult, and always very painful. A large sound generally answers better than a small one. It may be of silver or elastic gum. Those of elastic gum, though preferable when they are to be left to remain in the bladder, are frequently not strong enough, though furnished with an iron stilette, to overcome the resistance of the canal. However, whatever sound is chosen, it commonly enters with ease as far as the prostate where it is stopped, not only by the narrowness of the canal, but also by the new bend of this conduit. For the prostate cannot swell without pushing forwards and upwards, or on one side, that part of the urethra behind which it is situated; a consideration that must never be lost sight of in the length and direction which is given to the beak of the sound, which ought also to be longer, and have a greater bend, or be held higher during the introduction, than in other stoppages of the urethra. After having ascertained, as well as possible, that the end of the sound corresponds exactly with the direction of the urethra, and that the impediment to its entrance into the bladder only depends on the narrowness of the passage, the sound may be pushed in with force, without too much fear of

forming a false passage; for it will certainly rather dilate an actual conduit, in the direction of which it is forced than form a new road. We confess, however, that it would be dangerous for young inexperienced practitioners to follow this advice; those only should sound boldly, who, besides being perfectly acquainted with the different bends of the canal, have by frequent practice, obtained that decisive knowledge, which permits them never to lose sight of the situation and direction of the beak of the sound; for if while it was pushed with force, the beak was held too low, or inclined on one side, &c. it would certainly take a wrong road, and tear the membrane of the urethra; a serious accident in this case, which would only augment the inflammation of the prostate, and render the introduction of the sound more difficult. It would perhaps then be better to perform the puncture of the bladder above the pubis, rather than expose the patient to this danger. The observations of Mr. Noel, related in the *Journal de Chirurgie*, attest, after many others, the advantages of this operation, performed in the hypogastric region. Moreover, the inflammation of the prostate is one of the cases in which the greatest success may be expected from this puncture; for as it is the nature of inflammations to terminate in a few days, if a resolution takes place; the canula need not be kept long in the bladder; and the canal being free, if the sound be still necessary, the obstacle which opposed it being removed, it will

enter with the greatest ease. Nevertheless, though this operation has been so often successful, it must always be considered as not without danger, nor be practised till the sound has been repeatedly tried, and after trying if a bougie fixed for some hours in the urethra will not bring on a flow of urine; a fortunate event which it has often produced, though it had not overcome the obstacle. It is even the duty of the surgeon, to call in another before he undertakes the operation, particularly if there be one at hand who is more exercised in sounding. In short, if nothing can be done, the puncture must be performed without hesitation; but if the sound succeeds in entering the bladder, must it be drawn out after the urine is evacuated, or left in? It is certain that its stay in the portion of the urethra, incommoded by the prostate, only adds to the inflammation of that gland. On the other hand, if drawn out, it cannot perhaps be introduced again. All general advice therefore is difficult here. One can only decide from the difficulty experienced in introducing the sound, and the confidence one may have in one's skill in sounding, founded on constant success in analogous cases.

When the inflammation does not terminate by resolution, suppuration is frequently the consequence. This does not seem to attack the body of the gland, but only the integuments, and the cellular tissue which unites the lobes of which it is composed. This at least is what we have

perceived in several public dissections at the Hôtel-Dieu.

Though we have seen very extensive collections of matter in this gland, we have never found it dissolved or destroyed by suppuration ; on the contrary, we have always observed that it remained entire, and often larger than in its natural state. We have frequently remarked its cellular tissue appear filled with a purulent matter ; sometimes also, we have found several little bags or *follicles* filled with pus and placed between its lobes, and when the suppurations have been considerable, they have been almost always on the exterior of the gland, either between it and the bladder or on the side of the rectum.

We know that the retention of urine is kept up by the swelling of the prostate in suppuration ; when the symptoms of inflammation have continued beyond the eighth day ; when after having always increased till that time, they then seem to diminish to increase anew ; when the fever is redoubled towards night, and preceded by shiverings. These signs clearly announce a suppuration of the prostate ; but there is none to inform us if the pus has filtered into the gland, and is forming a deposit, nor, in this latter case, what is the precise spot which it occupies.

The prognostic of this disease is not the same in each species of suppuration. In general, when a collection being formed has its seat in the teguments of the prostate, the prognostic is less unfavourable, than when the whole cellular

tissue of the gland is macerated by the pus, or that there are several points of suppuration. In the latter cases a cure is rare. The pus being disseminated as it were over all points of the gland, can find no issue externally, and the want of positive symptoms will not allow an incision to be made into the prostate to favour the discharge. Moreover, the advantage of such an incision seems doubtful, it could at most only favour the evacuation of the matter near its edges, but would contribute little to the discharge of what was further off. There is nothing therefore but the absorption of the pus which can relieve the gland, and this nature can seldom perform. It is not the same, when there is only one point of suppuration, and which is situated in the cellular tegument of the prostate: if it is between the gland and the neck of the bladder, it often opens spontaneously into it, and can be reached by the beak of the sound. The pus being then brought out by that instrument, or is discharged with the urine, is no longer any obstacle to the detersion and cicatrisation of the bag which contained it. If the abscess is situated towards the rectum and perinæum, and its existence and position are clearly ascertained by the touch, a large incision in that part will accelerate the cure.

The indications to be performed are therefore not the same in these different cases; but in all, the sound becomes necessary, and even sometimes indispensable for the evacuation of the

urine ; and as it must be left for some time in the bladder, one of gum elastic is preferable to silver. Its introduction must be managed with all the precautions recommended in the inflammation of the prostate.

When an abscess is formed, and projects into the urethra, or entrance of the bladder, it is often pierced by the sound, the beak of which enters the bag which contains the pus. We learn this by the issue of a greater or less quantity of that fluid without any mixture of urine. In this case, it is necessary to wait till no more pus comes out of the sound, in order to draw it out a few tenths of an inch, and disengage it from this false direction ; it is then pushed in again, taking care to raise the beak more, to avoid its taking the same way, and to conduct it into the bladder. When the abscess has opened of itself, the pus mixes with the urine and comes out with it. Whether this opening is into the urethra or bladder, it is proper to leave the sound in, and to continue the use of it, till the urine ceases to be purulent. In the first case, it is necessary to hinder the urine, while it crosses the urethra, from entering the cavity of the abscess, from preventing its consolidation, and forming calculous concretions in it ; in the second case, it is useful for introducing slightly detensive injections into the bladder, which may be done twice a day, and each time, repeatedly letting the first come out directly, which only serves to dilute the pus, and clean both the bladder and bag of

the abscess ; but the last must be kept in, being destined to diminish by its mixture, the acrimony of the urine, and render it less irritating. For these injections, we generally employ a light decoction of barley, and with the same view, we prescribe a gentle diuretic beverage.

Retentions of urine produced by calculous concretions formed in the prostate, did not escape the pathological researches of the celebrated *Morgagni*. He found several of these calculi on dissection, and quotes a number of similar observations, made by former writers. These foreign bodies afforded much variety in their number, situation, size, figure, and internal structure. Sometimes several calculi have been found in the same gland. In some subjects they were contained in the cavities, in the form of sinuses hollowed in the prostate ; in others, they appeared at the opening, and along the course of the ejaculatory conduits. Some had hardly the size of a grain of millet, and some have been found bigger than a large cherry, sometimes smooth and rounded, at other times, oblong and unequal on the surface. Some seemed composed of a matter like stone, and were placed in the middle of the gland ; others only seemed to be a thickened and concrete semen, and were seated in the ejaculatory conduits ; but the greatest number were of the nature of real urinary calculi, lodged in the sinuses we have mentioned. The formation of these always supposes a rupture in the urethra or bladder, in consequence of an

abscess or former retention of urine, for which the patient had neglected to wear a sound long enough. The urine, in passing by this opening, flows into the bag of the abscess, or insinuates itself into the cellular tissue of the prostate, and, by a decomposition, or a simple spontaneous precipitation, deposits there the elements of these calculous concretions. These calculi also form after operations for the stone with the great lateral apparatus, when the wound is closed externally, without being united internally; which occasions a sort of internal fistula, in which the urine by its stagnation forms a salino-earthly (uric) deposit, which, by the addition of fresh layers, is susceptible of considerable increase.

The presence of calculous concretions in the prostate is announced by no pathognomonic symptom. The retention of the urine, and the impeded emission of the semen, are only symptoms common to several other affections of the prostate and urethra. A finger introduced into the rectum can ascertain the increased size of the gland, but cannot distinguish the nature nor cause of this tumour. When a calculus in the prostate presents a portion of its surface uncovered in the urethra, the shock of the sound on it, certainly proves the existence of an extraneous body; but it still leaves much uncertainty on the spot which it occupies; it remains to determine if it belongs to the bladder or prostate. For supposing the sound is stopped by a projecting portion of the calculus encysted in the

prostate; one may think it is a stone of the bladder driven into the urethra; and on the supposition that the sound, instead of being stopped, should slide over a bare point of the surface of the calculus, it is equally doubtful if it be lodged in the bottom of the bladder near the neck, or really in the prostate.

However, this uncertainty of the diagnostic leaves none in the indication to be followed. In fact, whether the calculus is in the prostate or bladder, or its neck, we must try to extract it, and the same operation is proper for both. It consists in making an incision in the perinæum and prostate, as in the stone with the great lateral apparatus. If the calculus be in the bladder, this incision renders the extraction easy; if it be encysted in the prostate, this incision is the most favourable for disengaging it and extracting it. It is true, that it may happen that the wound will not answer exactly to the spot which the calculus occupies in the prostate; but in this case, after having ascertained its real situation by the finger through the wound, the sort of partition comprised between the incision and the cyst of the calculus may be slit with the point of the bistoury, when it may be easily disengaged and extracted.

Another more frequent cause of the tumour of the prostate is the varicose swelling of its vessels, and of those in the cellular tissue which unites it to the neck of the bladder, and the commencement of the urethra. Anatomy shows

that these vessels form a plexus very visible to the eye, even in the natural state, and without the help of injections. This vascular plexus is susceptible of a considerable dilatation, and often exhibits a species of salient protuberances in the neck of the bladder, and similar to those which varices form in other parts of the body. In this disease, the prostate does not increase in size proportionally with its teguments. Their tissue is sometimes soft and spongy, sometimes dense and hard, according as the swelling is recent or old; in short this varicose swelling of the prostate presents the same varieties as the hæmorrhoidal tumours, with which it has much analogy, and with which it is often complicated. Both these and other diseased states are as often the effect as the cause of a retention of urine and of constipation: nothing gives rise to them so much as the efforts which patients exert to make water, or to go to stool. The violent contraction of the abdominal muscles, by pressing strongly the viscera of the abdomen, and thus impeding the return of the blood by the iliac and mesenteric vessels, produces an accumulation of blood in the veins of the perinæum, and by a necessary consequence, a kind of obstruction of all the viscera situated in that region. But, in this case, the varicose swelling of the prostate is posterior to the retention of urine, which it keeps up in its turn. The tumour of that gland also often precedes the retention of urine, and is its primitive cause. This disposition is not

unfrequent in old men; and even in young persons who have indulged to excess in venereal pleasures and spirituous liquors. It is also very frequent with those who have had several blennorrhagias, and piles complicated with obstruction in the abdominal viscera.

The retention of urine from the varicose state of the prostate is known, 1°. by an union of the symptoms common to the swelling of that gland; 2°. by the slowness with which the retention has come on, commonly preceded by a difficulty of making water, the progressive increase of which has been marked by species of paroxysms more or less violent, wherever the patient has been on horseback or in a carriage, or taken exercise, or heating liquors, or food capable of producing the same effect; 3°. by the indolence or little sensibility of the tumour formed by the prostate, which is known by pressing the gland with the finger introduced into the rectum; 4°. by the want of smarting when the urine crosses the canal, and of the signs common to other species of swellings of the prostate, and by the presence of some of the predisposing causes, enumerated above.

When there is a complete retention of urine, it is urgent to discharge it by the sound; but this operation is not easy, even for the most skilful operator. The rules and precautions given for the inflammation of the prostate are applicable here: it is particularly when the swelling is varicose, that the large sounds are

preferable to the small ones, and those of gum elastic to metallic catheters, which are not so free from inconvenience, when they are to remain in the bladder.

When the sound is stopped by the stricture of the portion of the urethra embraced by the prostate, instead of drawing it out to make fresh attempts, it is better, when one is certain that its beak is in the direction of the axis of the canal, to lean with force against the obstacle, and support it in that position: the pressure which the beak makes on the swelled sides of the urethra, lowers them, by dissipating the humour which swells them; and gives a facility for pushing in the sound on a second attempt. Continuing thus, sooner or later we get into the bladder. It is with this view that catgut bougies have been employed. After having introduced one of them into the canal as far as the stricture, it is fastened: and then swelling by the moisture of the urethra, separates the sides of it, and allows a second to enter further. When Desault had not yet acquired that habit of sounding which afterwards enabled him to get over with safety all obstructions of this kind, he used with success these catgut bougies. But they have the disadvantage, 1°. of acting too slowly, especially when the danger of retention is urgent; 2°. of being too stiff when introduced, and yielding with difficulty to the different bends of the urethra, which sometimes makes their introduction painful; 3°. they cannot

serve twice immediately; 4°. they must be drawn out, and renewed every time the patient wants to make water, which makes a great number of them necessary, together with great assiduity on the part of the surgeon.

It sometimes happens that the sound hitting some of the dilated vessels in the canal, tears them, and occasions bleeding. This, far from being hurtful, is often useful; it is a local bleeding which empties the vessels, and renders the entrance of the sound easier. When this bleeding does not happen, and the sound cannot be introduced, it is advisable to apply leeches to the perinæum, or to empty the vessels by a bleeding or two in the arm. This, though not so efficacious as if the blood were drawn directly from the swelled part, has nevertheless been tried with success.

After the urine has been evacuated by the sound, it must be left to rest in the bladder. Its presence in the urethra is necessary to dissipate the swelling of the prostate, and that of the portion of the canal which crosses it. The use of it must even be continued a long time; it must be cleaned every eight or ten days, (I think better every two or three,) and replace it by a new one whenever it is altered or encrusted by the urinary sediment. A perfect cure can scarcely be expected in less than six weeks or two months, and it must not be forgotten that the complaint is subject to a relapse. To prevent it, it is prudent not to leave off

the use of the sound all at once, and even subject the patient to keep it in at night, (or rather for a couple of hours in the evening,) for some time after his apparent recovery.

When we reflect on the analogy between the varicose swelling of the prostate, and that of the same kind which so frequently comes on the legs, we find that the same principles are applicable to their treatment. Now, experience has proved that the latter can only be cured by a strong compression long continued. It is in part by the same mechanism that a sound acts; and this led to the idea of making bougies of lead. It was conceived, that being harder, they would press stronger, and that their effect would be quicker and more determined. But these bougies could not let out the urine like sounds of gum elastic, they are not solid enough to overcome the obstructions of the canal, and, though flexible, are too hard to follow exactly the bendings of the urethra. It is to be feared moreover, that in pressing some points too much, they might occasion injury which might soon become gangrenous. After all, it is not to the pressure alone that the success of sounds is owing; their stay in the canal draws on this part and on the prostate a sort of irritation, which may greatly contribute to their discharge. In fact, this slight inflammation is soon followed by a puriform discharge more or less abundant; from which perhaps result the diminution and obliteration of the vessels and dilated cells;

while the sound, keeping the urethra dilated during this work of nature, preserves the freedom of that conduit. However, I give this explanation only as a conjecture which is not unlikely nor improbable.

A swelling and scirrhus induration of the prostate is another disease very common to old men, and those who have had several blennorrhagias. Nevertheless it does not always proceed from a syphilitic infection; herpes and itch may occasion it; and it is even sometimes the hidden effect of a scrofulous disposition. The size and hardness of the gland vary much, according to the duration of the swelling. It has often been found almost as hard as a cartilage; more frequently its tissue was lardaceous, and seemed filled with an inspissated lymph; sometimes it has been double and triple its natural size; and *J. L. Petit* says he has seen it even as large as a fist. Sometimes only a part of it has been found scirrhus; at others, the whole substance was affected with the same induration.

The diagnostic of this disease is drawn from the signs common to the swelling of the prostate, joined to those connected with its remote and proximate causes. The finger introduced into the anus, which is not very painful, will also help to distinguish the hardness of it.

When the swelling is not very old, and the cause syphilitic, the prognostic is more favourable than when it is complicated with scrofula,

or depends on any other humoral cause difficult to remove. When the gland has the hardness of a cartilage, its organisation is destroyed, and no hope remains of a cure.

The retention of urine being a common symptom of scirrhus of the prostate, the introduction of the sound becomes necessary, and is often more difficult than in the other swellings of the prostate. The hardness of the gland not allowing it in this case to yield to compression, sounds of a small diameter succeed better than those which are larger: it even often happens, that being obliged to use much force to separate the sides of the canal, and the sounds of gum elastic not being solid enough, though furnished with a stilet, the surgeon is obliged to make use of a silver catheter, of the size of those used for children. Sometimes even, notwithstanding its smallness, it will only enter by being turned gently round in the urethra; but in doing this, it is essential not to lose sight of the direction of the canal, with which the beak of the sound should always correspond. When it has got into the bladder, it is fixed there with two little strings, which pass under the hips, and are attached to a bandage round the body. After this catheter has been worn two or three days, the canal being more free, will generally allow it to be replaced by a little sound of elastic gum. This is left in for two or three days, and then a third, which is larger, and after the same period a fourth, and even a fifth, which must be

progressively larger, till the natural diameter of the canal is restored. In short, the sounds are continued till the kind of suppuration which has gone on in the urethra is dried up, and when the finger feels by the rectum that the prostate is reduced to its ordinary size; which seldom happens till the thirtieth or fortieth day of the treatment, and sometimes later. At the same time, the remedies appropriated to the known cause of the complaint are given internally; as antisyphilitic, antiscrofulous, &c.

We shall not speak here of those pretended resolving bougies that have been proposed for these kinds of swellings; 1°. Because we think them quite insufficient for the purpose. 2°. Because we destine them for a separate article, where we shall compare them with sounds of gum elastic.

When the swelling of the prostate arises in consequence of an ill-treated blennorrhagia, or a suppression of it, all the means must be employed to bring it back that have been recommended above, and if they do not succeed, recourse must be had to an inoculation of the blennorrhagia.

The disease of the prostate is often attended with a fistula, which opens in the perinæum, before the gland, though the source of it is behind.

If the complaint is recent, and the patient young, mercurial frictions may be applied to the perinæum and inside of the thighs, or a seton, or

blisters repeatedly to the perinæum, not forgetting the bougies, and the internal use of hemlock in large doses. When the evil is inveterate, and the gland is scirrhus, or has formed a fungous excrescence, as in the case of Dr. Fothergill, the disease, particularly in aged persons, is generally fatal.

In the chronic tumour of this gland, a decoction of the bark of the root of the *daphne mezereum* has been recommended internally, with the use of bougies, or the application of a little oil of turpentine externally, together with sea-bathing; but I do not know if these remedies have ever been successful. Opiate clysters are the best palliatives for this complaint; but they are often injurious to the patient by occasioning constipation. In this case, the extract of *hyoscyamus niger* employed from time to time by the mouth or anus is preferable. It has been observed, that hemlock given in large doses, and for a long time, has procured great relief.

In obstinate cases, I would advise the application of a cataplasm made with the powder of *digitalis*, or of *belladonna*, and a little flour, and at the same time the use of one or other of these plants internally.

CHAPTER XII.

OF SYPHILITIC ULCERS AND FISTULAS IN THE
GENITALS.

THE name of chancre was first given to ulcers which arise in the genitals of both sexes, probably from their resemblance to the corroding ulcer called a cancer.

Most of our modern authors and practitioners confound under the name of chancre all the ulcers which appear in the genitals or neighbouring parts; some give the name also to aphthæ or ulcers in the mouth; others extend it to all ulcers on any part of the body produced by the syphilitic virus in the system; others, in short, give the name of chancre to ulcers of the genitals, as well as of other parts, but only when they come from a primitive syphilitic infection; and they call "venereal ulcers" all those in any part of the body, which are the consequence of a constitutional infection.

The word chancre, therefore, being very vague, and subject to lead into error, I shall not use it in this treatise. Nor do I think it right to employ the word *venereal* to mark these ulcers; for I wish to keep in view the ob-

servation I have already made, that ulcers may appear in the genitals, after the venereal act, without proceeding from the specific virus, properly called syphilitic. This distinction is as important as it is neglected in practice.

I think that the considerations which have induced me to change the ancient nomenclature in different parts of this treatise, will strike those of my readers who are accustomed to reflect.

The most general way in which the syphilitic virus is communicated being the union between the sexes, the syphilitic ulcers appear at first on the most irritable surface brought into contact; thus they are generally observed on the internal surface of the prepuce, on the crown of the glans, on the frænum, on the glans itself, and more rarely on the external surface of the prepuce, on the skin of the penis, on the scrotum, the thighs, &c.; and in women, on the internal or external surface of the great labia, on the clitoris, the orifice of the urethra, the nymphæ, the vagina, the thighs, or else on the lips, tongue, &c.

The syphilitic virus never acts (at least at present in Europe) on a sound person, except when the infected fluid is applied on some part of the body, and rests there a certain time to act. On whatever part it be placed it will produce an ulcer; but it will readily be conceived, that it will act the more easily and rapidly according to the greater irritability of the part;

or if the fluid be less exposed to be carried off, and the more the mucus secreted by the part retains it, without, however, being sufficient to produce a blennorrhagia.

It is also most frequently observed, that syphilitic ulcers come on the red, moist, or secreting surfaces of the body, while they are rarely seen on the white or dry surface of the skin, and seldom also on those where there is a great secretion of mucus, as in the urethra or vagina; because the mucus diluting the virus, weakens its acrimony, and defends the parts against corrosion. What I have said is applicable not only to syphilitic ulcers, which come from a primitive or original infection, but also to ulcers which appear on the genitals, as well as in the throat, mouth, or surface of the body; and arise from a secondary infection, or what is commonly called a general or constitutional infection of the body.

This distinction between *primitive* and *secondary* ulcers, or, as some authors call them, *local* and *universal*, is of great importance in practice, because the recent ulcers of the first kind can often be cured by topics alone, or at most they only require a combination of these remedies with small doses of mercury internally; while those of the last kind can only be radically cured by a complete mercurial treatment.

I have already said, that primitive syphilitic ulcers commonly appear on the frænum, or near it, behind or on the crown of the glans, on the

glans itself, or the internal surface of the prepuce; but more rarely on the surface of the penis, on the scrotum, &c. I have observed in the chapter on blennorrhagia, that the virus lodged behind the crown of the glans, sometimes produces an inflammation with a discharge from the small glands situated in that part; that this discharge is commonly without ulceration, and that I have named the complaint the blennorrhagia of the glans (*blennorrhagia balani*). If the internal surface of the prepuce becomes the seat of the virus, it hardens, swells, and thickens, and ulcers come on sometimes attended with a phimosis or paraphimosis.

From what I have said, it appears that the genitals may be affected with ulcers of a very different nature, according to the cause which produces them; thus they may be syphilitic, herpetic, scorbutic, mercurial, phagadenic, &c. It is difficult to say of what nature were the ulcers of the genitals in both sexes, of which the ancient Greek, Roman, and Arabian physicians make mention.

It is not by the external characters alone that the nature and different species of ulcers of which we have been speaking can be discovered and distinguished; to the inspection and practical experience, must be added a thorough knowledge of the complaint, an attentive examination of the actual state of the patient, of his constitution, of past circumstances, and of the remedies and regimen he

has followed ; nevertheless, the following symptoms may guide our judgment.

Syphilitic ulcers are known in general by hard and callous edges, by a white, softish, or lardaceous crust, or dirty mucus, with which their base is covered, by a more intense redness of the skin round the ulcer, by their continual tendency to spread and corrode, and because they can only be cured by the help of art, and by mercury. But the symptom which seems to be the specific character of syphilitic ulcers, is a certain thickening or a sort of callosity of the parts attacked, which constantly attends them. In short, these symptoms are the more to be depended on, if the patient knows and confesses that he has exposed himself to infection.

Ulcers not syphilitic are distinguished from them by the following diagnostics :

1°. They have a different appearance.

2°. They often remain stationary without spreading and corroding the surrounding parts ; or else if they are of a corrosive nature, they spread in general more in depth, while syphilitic ulcers generally spread more superficially.

3°. They often disappear of themselves, by means of cleanliness, without the help of art.

4°. When they only appear during the use of mercury.

5°. When they grow worse during the use of mercury, either externally or internally.

6°. If they have been already treated with mercury without success.

7°. If their sensibility is exquisite.

8°. If the body is in a state of asthenia or general debility, and if the affected part, from which an ichorous matter is discharged, be soft and relaxed.

9°. If there are symptoms of other diseases, as scurvy, leprosy, tetters, scrofula, or some other cachexia or cacochymia, either alone, or complicated with syphilis.

Some have thought they observed that syphilitic ulcers, which appear on a dry or white surface of the skin, occasion absorption of the virus sooner than when they attack a moist and red surface.* I have observed at least constantly that the virus always produces more violent symptoms and ravages, when absorption takes place in ulcers of the first kind, than of the second.

The time which the syphilitic virus takes to produce the ulcers differs not only according to the particular structure of the part, and the health and constitution of the patient, but perhaps also to the quality of the virus itself, though this has been denied by several modern

* I understand by *dry or white surface* of the skin, the greatest part of the teguments of the body covered with the dry and laminous epidermis ; and by *moist and red surface*, that which has not the same epidermis, and which being only covered with a transparent pellicle, (*epithelium*,) allows the colour of the blood to be seen, and is always moist ; as in the lips, vulva, glans, and canal of the urethra, and in all the openings where the epidermis folds back towards the interior of the body.

writers. In fact, when we consider with attention the remarkable difference in the effects of the virus, when it first appeared in Europe, with what it is at present, and especially the ravages which it commits at present among nations where it was absolutely unknown, as we have recently seen in Canada, and various islands of the Pacific, we cannot help thinking, that the symptoms, more or less alarming, do sometimes proceed from the more or less acrid quality of the virus.

Syphilitic ulcers appear in general on the red or moist surface of the genitals the second or third day after an impure coition ; however, I have seen cases where they appeared twelve hours, and others where they only came seven or eight days after ; while those which come on some part of the dry surface of the body, rarely appear before twenty or thirty days. In the case of ulcers on a moist part, the disease begins generally by an itching, and by little transparent pustules or vesicles, filled with a limpid humour, which some writers have therefore called *crystalline*. The pellicle of these pustules soon breaks by the itching and consequent rubbing, and one or more ulcers appear, the base of which is covered with a mucosity or lardaceous crust, and which corrodes less in depth than in surface. In the case of ulcers on a dry part, when a primitive syphilitic ulcer is formed on the body of the penis, on the scrotum, or on the skin, covered with the dry epidermis, it

declares itself by a round, hard, and red pustule, which in general only inflames slowly, and which ulcerating at last, discharges a clear ichorous humour.

There are other malignant, obstinate, corroding ulcers which sometimes appear in the genitals of both sexes, and which must not be confounded with syphilitic ulcers, as they require a quite different treatment. Several kinds of these ulcers were well known to the ancients, and are particularly described by *Celsus*, under the name of phagedenic ulcers of the penis. Their nature is very different from syphilitic ulcers, and they are very subject to corrode in depth, and to destroy the glans, urethra, and even the *corpora cavernosa* of the penis. I think I have observed, that these ulcers are often seated at the beginning in one of the glands of the crown of the glans, and that though perhaps sometimes of syphilitic origin, they are often of a very malignant nature, or arise from the abuse of mercury, and consequently require a very different treatment from common syphilitic ulcers.

There is another sort of ulcer also known to the ancients, which comes sometimes on the glans penis, and quickly produces a mortification of the part. It seems to have nothing in common with the syphilitic virus, which notwithstanding sometimes produces the same effect even at present.

It is proper to repeat here, that in reading the

ancient Greek and Latin authors, we must remember that in general they give the name of *cancer* to what we now call gangrene or mortification, and apply the word carcinoma to what we now call cancer.

But it is not only the organs of generation which are subject to primitive syphilitic ulcers. Any other part may become the seat of them, when it has been exposed to the immediate contact of a syphilitic ulcer, or to matter impregnated with the virus. The parts of a healthy body, particularly the fingers and hands, are much more subject to be seriously attacked with it when the skin is lacerated or wounded, or that there is a sore of any kind.

I know a remarkable example of an infection of this kind. A man having wounded himself with a penknife, exposed himself the same evening to the infection without suspecting he had to fear any bad consequence. But at the end of two days, the wound changed into a very bad syphilitic ulcer, with a hard obstinate swelling of the whole arm, and a tumour of the gland under the armpit, followed by symptoms of general infection.

All medical persons are the most subject to this sort of infection, and they cannot take too much care to wash their hands after having touched patients, particularly those whom they suspect. I even recommend the greatest cleanliness to all my patients themselves; for though the contrary has been maintained, I think

it probable, that the syphilitic fluid of an infected part is dangerous for the patient himself, if applied to another part of his body.

I have certainly seen many very melancholy examples of practitioners, particularly accoucheurs, who having a sore on the hand, or neglecting to wash themselves carefully, were attacked with syphilitic ulcers in the hand or arm. I have seen the same happen to anatomists dissecting infected bodies. The effects of the virus in this manner have always been much more violent and obstinate, than when the red surface of the genitals was the seat of the disorder. I knew a midwife who having been infected in this manner suffered for several years, from the consequences of it. An accoucheur, who in 1779 delivered an infected woman in London, had a tumour in the lymphatic gland in the interior of the arm, and a swelling of the lymphatic glands of the armpits, attended with the most violent and obstinate symptoms. *Dr. Macaulay*, a skilful accoucheur, also suffered greatly from a similar infection, and though he used the best remedies, he was not cured after suffering many years.

Though I have examined with the most scrupulous attention all cases of this kind that have come under my notice, I could never discover in the constitution of the patients any particular cause for such violent symptoms. I knew two men, who before and after an ulcer on the dry parts, had syphilitic ulcers on the red and moist

parts of the body, in which the virus only produced its common effects. It seems therefore probable, that primitive syphilitic ulcers on the parts covered with the epidermis, or on the dry white surface of the body, must be excited either by the virus being extremely acrid, or that it produces more violent effects from being applied to a part where there is no mucus or humour to dilute it, or to defend the parts from its acrimony. At least we seldom observe that primitive syphilitic ulcers situated on red or moist parts, nor even secondary ulcers which come on any part of the surface of the body, are attended with such violent and obstinate symptoms.

Women are equally subject to syphilitic ulcers in the genital parts ; but when they are attacked with them, the consequences are seldom so dangerous as in men. Their more sober mode of life, the less irritability and different structure of the external parts, the great quantity of mucus with which they are moistened, which moreover exposes them more to blennorrhagia, prevent the rapid and violent progress of syphilitic ulcers. Nevertheless, I have sometimes seen these ulcers, especially in hospitals, become gangrenous when seized with a fever, or when there was any other complication of the disease. The seat of these ulcers in women is especially in the great labia, the raphe, the nymphæ, but seldom in the vagina or uterus.

Most routine practitioners consider all ulcers in the genitals as syphilitic ; and it is generally

after the most superficial examination, that they thus pronounce on their nature, and treat them as such. I have remarked above, that the same mistake was often made with blennorrhagias; but there is this difference, that the mistake in ulcers is attended with much more serious consequences, for if their nature be not understood, and they are ill treated, the destruction of the genital parts often follows, and even sometimes death. It is nevertheless very easy to ascertain, that, in our days, as well as those of the Greeks and Romans, there are ulcers in the genitals of both sexes, which though produced by copulation, and communicated by contact, are not of a syphilitic nature, and proceed from an acrimony or miasma of a very different nature. Without pretending to determine the quality or nature of the different acrimonies in the blood in different diseases, we know at least the facts; we often see the acrid humours of the blood thrown on the surface of the body, and producing a great variety of cutaneous diseases. There is no enlightened physician who would presume to attribute all these disorders to one single cause or acrimony. Is it not therefore astonishing to see practitioners in general pronounce so lightly on the nature of all ulcers in the genitals? Are those parts in both sexes exempt from being attacked by such causes? We see every day modest women subject to discharges from the uterus or vagina, which in many cases are so acrid that they even corrode the thighs of the

patient. I was consulted some years ago by a woman attacked with a discharge from the vagina, with symptoms which several practitioners whom she had consulted pronounced to be of a cancerous nature; the patient had certainly no syphilitic symptom; nevertheless, the surgeon who examined her at the same time, and did not take care to wash his fingers after, had one of them, attacked by a very obstinate ulcer, which lasted many months. I know several surgeons who having imprudently touched the herpetic ulcers of their patients had their fingers ulcerated. Can an unprejudiced physician believe that a man cohabiting with such a woman will be secure from infection, because the discharge is not of a syphilitic nature? Modern chemistry will no doubt throw some light on the nature of these acrimonies; and in the meantime I shall observe, that the discharge in many complaints of women changes litmus paper red, and gives other evident marks of acidity. Would this acrid matter have less action on the genitals of a man, or could it be said that a person who had ulcers or excoriations from this cause, had syphilitic ulcers? Certainly not. The same causes and acrimonies which may produce different blennorrhagias, when applied to the cavity of the urethra or vagina, may also produce different ulcers, when applied to the surface of the genitals.

If these ulcers are called *venereal*, because they are the consequence of impure coition, it

must be allowed, that that word ought to have a different meaning from what it commonly has in medicine, and that those ulcers are really very distinct from those which depend on the syphilitic virus.

In several ancient authors, we find ulcers, pustules, and sores of the genitals, very exactly described before syphilis appeared in Europe. These diseases were often communicated, according to the observation of the same authors, by coition; nevertheless, they do not appear to have been of a syphilitic nature; for they were cured without mercury, and were not attended with the general symptoms which the syphilitic virus produces when absorbed in the system, and which characterise the disease we call syphilis. Do not we often see ulcers in the genitals continue many weeks and even months without producing buboes, or other symptoms of general infection, precisely as it happened before the appearance of the syphilitic disease? Do we not see every day ulcers of the same parts, which instead of yielding to mercury, evidently grow worse during the use of it? In short, can we always pronounce that an ulcer is syphilitic, simply because it disappeared during the use of mercury?

What I have observed concerning the ulcers of the genitals in both sexes, is equally applicable to ulcers of the mouth, throat, &c. I have seen these ulcers terminate by gangrene and death, because their nature was mistaken, and they

were treated as syphilitic ; and what I have said of recent ulcers, will equally apply to old ones, which, though really of syphilitic origin, often assume a different appearance during the mercurial treatment, and at last lose entirely their syphilitic character. Instead of cicatrising, as they seemed ready to do, they begin to yield a clear and ichorous matter ; they become painful, very irritable and corroding ; and if the practitioner insists imprudently on the use of mercury, he exposes the patient to the loss of the affected organ, and even to death.

I shall here relate some examples which will demonstrate the importance of this doctrine. See also chap. ix. vol. ii.

A young man twenty-two years old, of a strong plethoric constitution, consulted me about a chancre, as he called it, on the glans, with which he had been afflicted for nine months. He had consulted at Dublin, from the beginning, a famous surgeon, who prescribed a mercurial course, carried to salivation. But the ulcer not healing, mercurial fumigations were made for some time on the part affected. By this means, the ulcer seemed to diminish in extent, and assume a better appearance, but did not close. The patient was therefore advised to go a second time through what is called the grand remedy, and mercury was given both internally and externally ; but by this new course, the ulcer became larger and deeper, and grew worse in every respect.

In this state he came to London and consulted me. I found the glans affected with a broad and deep ulcer, the edges of which were hard and prominent, and extremely sensible to the least touch. Its basis was reddish and pretty clean, and the matter it yielded acrid and corrosive; and, in fact, it had already destroyed half the glans. I told him that this complaint had nothing to do with the syphilitic virus, and that from my experience mercury was the least suitable for such ulcers.

I added, that the cure would require at least two or three months; on which he quitted me, saying he would come the next day, and put himself under my care. But I heard no more of him for four months, when he sent for me. His complexion, from being lively and fresh, as it was the first time I saw him, had become pale, sickly, and cachectic; in short he was so changed I hardly knew him. He related his history to me as follows. "Not being satisfied with your opinion on the nature and treatment of my complaint, I consulted the famous Mr. Pott; who after an attentive examination declared, that the ulcer was really venereal, and assured me that nothing could cure it but mercury; that I had not taken enough, nor the best preparation for the case; adding, that far from two or three months, I would probably be radically cured in three or four weeks. On this assurance, I immediately submitted to a new mercurial course, which occasioned a gentle salivation; the ulcer

seemed to get remarkably better for the first three or four weeks; but afterwards, instead of healing, it corroded the rest of the glans with a part of the urethra. Pott then proposed to call in another surgeon (J. Hunter), who advising the amputation of the part, which Mr. Pott refused to do, I determined to abandon their advice, and to consult you again." I found the part very much swelled, the prepuce affected with a complete phimosis, and the urine coming out by three or four different holes. I advised him to have an incision made in the prepuce, that the state of the ulcer might be discovered, and suitable remedies be applied. I prescribed at the same time the decoction of green walnut shells. He took it for eight or ten days, but put off the operation from day to day, when one of his friends advised him to consult another physician, who promised to do great things with a decoction of hemlock and ginseng root. He took it for several days with very little effect, and the erosion still went on. At length he consulted another physician of my acquaintance, who insisted on the same remedy as I had prescribed, with a nourishing diet, country air, and sea-bathing. By this means he is now recovered, but with the loss of half his penis, which he would have preserved almost entirely had he followed my advice in the beginning.

On this case I shall make a few remarks, first, that it is improper to administer a complete mercurial course, for a recent and local syphilitic

ulcer, like that of this young man, when he first consulted the surgeon at Dublin; that the second course, attended with mercurial fumigations, was still worse; that not only it was imprudent to advise a third course, when the two former had shown themselves useless, but a very pernicious prescription, which in fact rendered him unfit for the act of generation the remainder of his life; and that the advice of the last physician to make use of strengthening medicines, with nourishing diet, country air, and sea-bathing, was judicious and proper, which the patient only adopted on account of his sufferings and his dread of death; but which would have restored him in the beginning had he followed my advice.

I was consulted in another case, in which ulcers had appeared in the throat during a mercurial course. They were considered as syphilitic, and had therefore been treated by continuing mercury internally. But they grew so bad, that they almost entirely corroded the two tonsils, with the veil of the palate, and reduced the patient to the most dreadful state. He was cured by leaving off mercury, and following a strengthening regimen and remedies.

Brambilla has given us the history of a patient, who during a mercurial course was affected with ulcers in the throat, which the surgeon took for venereal. This patient not only lost the veil of the palate by continuing the mercury, but it brought on a caries of the jaw-bone, and ended

in death. The same author observes, that there are tumours or inflammatory ulcers which are very often exasperated by the use of mercury, either internally or externally, though their origin was decidedly syphilitic. I have seen several examples of patients, who, having got syphilitic ulcers while they were affected with scurvy, were not only reduced to the most deplorable state by the imprudent use of mercury, but even lost their lives.

Fabre, in the *Supplement* to his *Observations sur la maladie venerienne*, also relates several cases, in which ulcers, though proceeding originally from the syphilitic virus, far from being cured by a long use of mercury, both internally and externally, and even by repeated salivations, became on the contrary so obstinate, that they would yield to no other remedy, and occasioned death.

All these cases amply confirm the observations I have made on this interesting subject. It is therefore of the greatest importance in practice to distinguish with great attention :

1°. Primitive ulcers, original or local, on the dry or moist surface, caused by the immediate contact of the virus, from secondary, constitutional, or universal ulcers of the same kind, produced in different parts of the body, by the virus absorbed and deposited on the parts.

2°. Ulcers or chancres proceeding from the syphilitic virus applied to the genitals of a sound person, from those which proceed from an acri-

mony of another kind, externally applied to the same parts.

8°. Secondary syphilitic ulcers, which are the consequence of a general infection, from scrofulous, herpetic, scorbutic ulcers, or that are produced by some other acrimony deposited from the general mass on the genitals or any other part of the body.

4°. Syphilitic ulcers from aphthæ, or, as they are commonly called, chancres in the mouth, tongue, lips, gums, &c., produced, either by scurvy, or an acidity or acrid humour in the stomach.

5°. Syphilitic ulcers of the mouth, throat, &c. from mercurial ulcers caused by the acrimony of the saliva or mucus, during the use of mercury, externally or internally.

6°. Ulcers which really owed their origin to the syphilitic virus recently applied to some parts, or to the same virus deposited from the infected mass of blood on those same parts, from those which by time or the use of mercury or other remedies have lost their primitive syphilitic character, and which instead of healing grow more malignant by the continuance of mercury. These ulcers are often truly *mercurial*, or are owing to the fluid acrimony, or the state of weakness or general irritability of the body, produced by a long use of mercury, or by improper regimen or remedies. It is on the exact and precise distinction of these different ulcers, that our success in practice depends, as well

as our reputation, and the happiness of our patients.

To mark this distinction, and to designate by specific names the different kinds of ulcers, I shall continue the plan I have already followed, and through the whole of this work, shall give the name of syphilitic ulcers to all those which proceed from the syphilitic virus, as I have already given it to the blennorrhagia occasioned by the same; and I shall apply the same name to all affections from the same source, in order to distinguish these blennorrhagias, ulcers, and other affections, from those which may proceed, and which in fact do often proceed from other acrimonies, known or unknown, engendered in a sick person, or communicated during coition between a healthy and a diseased person.

METHOD OF CURE.

I have shown in this chapter how much different ulcers of the genitals have been confounded by modern writers, under the name of chancres, and consequently how uncertain and often fatal must have been the treatment they employed. The young practitioner, who has well understood my ideas, and is convinced of their truth, and their use in practice, will see how much this branch of medicine has been improved of late, and will be convinced, that most of the unfortunate persons, who were formerly

allowed to perish or languish, after having lost the parts of generation, may be relieved or radically cured by a more enlightened method, and better adapted to the nature of these different ulcers.

I shall therefore resume the most important points for consideration, when we are consulted on an ulcer in the genitals. 1°. What is the real nature of the ulcer, its actual state, and what has been its progress. 2°. How long the patient has been affected with it. 3°. When we are certain that the ulcer is syphilitic, to determine if it is simple or complicated, with a swelling of the neighbouring lymphatic glands, and then, if it be primitive or secondary, that is, if it proceeds from a recent or original contact, or from a general or constitutional infection of the body. 4°. What remedies the patient has already used; and if mercury, what preparation and in what quantity. 5°. What is at present, and what has been for some time past, his manner of life as to diet, exercise, and residence. 6°. His temperament, and if it be feeble or irritable, it is important to determine, whether that weakness or irritability is natural, or if it proceeds rather from the regimen which the patient has followed, or the medicines he has taken.

All these points should be well examined, meditated, and determined, before we decide on prescribing remedies. An honest and enlightened physician should leave nothing to chance in such cases, in which the routine practitioner, or

careless quack, too often expose the life of their patients.

It has been published lately, that syphilitic ulcers, and other symptoms, will often heal of themselves or without any remedy. But I never saw nor ever heard any attentive observer say, that any syphilitic symptom ever healed of itself, at least in England, France, or Germany.

Several modern surgeons have recommended the extirpation of all recent chancres or syphilitic ulcers of the genitals by means of caustic, that is, to touch them once or twice in the twenty-four hours with the nitrate of silver (*argentum nitratum*), till the scars come off successively, and the base of the ulcer is red and clean. This practice may no doubt sometimes succeed, but I cannot advise it. Ulcers indeed generally heal pretty soon by this method; but I have often observed that buboes are the consequence. At other times it happens, that the virus concealed under the scar produced by the caustic, corrodes the parts beneath, and thus, instead of a little superficial ulcer, makes a very deep one, which then requires other means. There are constitutions moreover that will bear no acrid application whatever, much less caustic. I have seen it when applied to irritable or scorbutic constitutions produce very bad symptoms, and I observed a case where the mortification of the part was the consequence of such an application.

Several other writers have advised all syphili-

tic ulcers, primitive or secondary, to be treated in the same way, that is, by a mercurial course internally, and never any external application. They allege in favour of this method that chancres are signs of the virus in the body; and that consequently if they disappear by the simple use of mercury internally, we are certain that the remedy has penetrated through the mass of blood to the parts affected, and therefore the virus is totally eradicated. To this I answer that recent syphilitic ulcers, produced by an immediate or primary infection, are by no means symptoms of syphilis, as we are told. On the contrary, they are in these cases only a local disease, which chiefly requires topical applications. I agree certainly, that if by the neglect of the patient or by wrong treatment, they continue some time, an infection of the system will follow; and then, just as when they proceed from a universal or secondary infection, they are certainly symptoms which prove the presence of the virus in the general mass. In this case I am certainly of the same opinion, *viz.* that they should be treated with the internal use of mercury alone, without any external application; because, if the internal use of mercury makes them disappear without any topical application, we are sure of having eradicated the virus and cured the patient radically. But when they are in the genitals, or affect the arm or hand, the virus often excites violent inflammations and very dangerous

ravages; or else it is absorbed and carried into the lymphatic glands, and produces tumours of those glands before the mercury has had time to produce its effects, and to destroy the virus in the part affected. I am therefore of opinion never to confine oneself in this case to mercury internally alone. My reasons are :

1°. That by the application of topics we may hinder ulcers from spreading and becoming dangerous; 2°. that by the same means the formation of a bubo may often be prevented; 3°. that we lose nothing by topical remedies, as mercury may be employed at the same time internally, if judged necessary; 4°. that if the patient is become feeble and irritable by the progress of the disease, or by a previous use of mercury, this remedy will not only be of little use in accelerating the cure, but will rather retard it, and in some cases, will become pernicious if continued.

As to the objection which has been made, that buboes very often appear after syphilitic ulcers of the genitals have been cured by topical remedies, and therefore the very remedies advised to prevent buboes often produce them, I allow that buboes and even the syphilis sometimes appear after topics; but I am very far from thinking that these remedies should be blamed for it, (but with the exception of caustics). It is what we see every day without using any topical remedy whatever, and what we have constantly to fear, while there

remains the least vestige of a syphilitic ulcer. I am even more inclined to attribute these accidents to the delay in using topical applications, or else to the bad choice of them.

I conclude therefore, that the most reasonable and certain method of curing primary and recent syphilitic ulcers, as well as secondary ones, especially such as from their situation or particular state may be of dangerous consequence, is the topical application of mercury, joined with the internal use of it; and, if the latter be insufficient, to continue the topics, together with internal medicines suited to the constitution of the patient, and the nature of the complaint we have to subdue.

In general, in all syphilitic ulcers, the best topical remedy is mercury, whatever some modern writers may say. But applied as it commonly is, it often has no effect. The preparation which I have found the most efficacious in most of the ulcers of the prepuce and glans that are covered with a lardaceous crust, is the red oxide of mercury; or else the submuriate of mercury when they are covered only with a mucous matter, or after the lardaceous crust has disappeared; each applied in powder on the ulcer, and covered with a little fine lint, and cerate, to be repeated once in twenty-four hours. I must observe here once for all, that I never use any submuriate of mercury but what is prepared by precipitation after the manner discovered and described by

Scheele, (see vol. ii. chap. xx.) In other cases, the mercurial honey (*mel hydrargyrum* Ph. Syph.) may be used with success.

With women I order the grey mercurial ointment, of the size of a nutmeg, to be introduced into the vagina morning and evening; and to hinder it from running out when it melts, I advise them to wear such a bandage as they use during their menses; it is also proper to make them wear drawers, that the ointment may not stain the shift, and thus betray the patient. The natural motion of the body, during the exercise of the day, helps to spread and apply the remedy on the parts, and the ulcers heal commonly very soon. A part of the mercury is thus absorbed into the blood, and the local complaint is thus radically cured; and moreover the slight and recent syphilitic affections produced by the absorption of the syphilitic virus into the system, by this simple method regularly continued, is perfectly cured. The same means are also very useful and efficacious in the syphilitic blennorrhagias of women.

These external remedies must be continued regularly and without interruption, not only till the ulcer has entirely disappeared, but till there remains no hardness whatever in the surrounding skin; for we may establish it as a general rule in practice, that there can be no radical cure of a syphilitic ulcer as long as there remains the least hardness or

thickening on the spot or near it; and even though the ulcer should be consolidated, the virus, not being completely destroyed, will soon appear again, either in the same place, or some other part of the body.

To resume therefore, I think that mercury applied topically is not only never hurtful in syphilitic ulcers, but on the contrary is very useful and almost sufficient for the cure, when the ulcers are local, and proceed from a primary affection; in short that it is always necessary when the progress of the complaint is rapid and threatening.

In cases where the ulcer is covered with a thick, hard, lardaceous crust, the best means is to employ, as already stated, first as a topic the red oxide of mercury, with which the ulcer must be sprinkled, covering it with a little cerate on lint, as long as the white crust remains; but as soon as the base of the ulcer becomes red, and has a cleaner appearance, the submuriate of mercury in powder must be used. In inveterate or secondary ulcers, it is sometimes better to apply the *lotio syphilitica lutea*, (Ph. Syph.) or else the *liquor ad condylomata*, or a little of the nitrate of silver, dissolved in a great quantity of water, by means of lint steeped in either of these lotions.

Some modern writers, probably led away by the opinion that mercury has no immediate action on the virus, have asserted that as a topic it was of no avail in syphilitic ulcers. My

daily experience proves this assertion to be erroneous.

These authors have not attended to the quick and powerful effects which frictions on the gums with the submuriate of mercury produce in syphilitic ulcers of the mouth: they have not considered the sudden and powerful effects of mercurial fumigations on syphilitic ulcers, nor the effects which mercury has on buboes by producing a resolution and radical cure of those tumours, sometimes in two or three days, when employed in frictions on the affected side below the swelled glands. These effects cannot certainly be attributed to the change which mercury may effect in the constitution during so short a time; moreover, I do not recollect ever to have seen syphilitic buboes resolved by the internal use of mercury, though I have seen many suppurate, and several take a very bad character under this mode of treatment.

Those who have maintained that mercury has no specific action on the syphilitic virus, have also said that if they are mixed together, they would each retain their original properties in the mixture. But the experiment of Dr. *Harrison* seems to prove directly the contrary: he took some of the matter of a syphilitic ulcer in the genitals, and after having triturated it well with the black oxide of mercury, he inoculated himself with the mixture. No infection followed, while the same matter inoculated pure, and

without being mixed with mercury produced a syphilitic ulcer.

But abstracting from all these facts and reasonings, the constant effect of mercury employed locally, in numerous cases in my practice, proves unequivocally the powerful and immediate action of it on the syphilitic virus.

Nevertheless, topics are not sufficient, and it is necessary at the same time to administer mercury internally, when the primitive syphilitic ulcers are of some standing, or come from a constitutional infection, both to prevent the infection of the mass of blood in the first case, and to eradicate the old virus in the second. In the first case, it must be continued twelve or fifteen days after the ulcers are perfectly consolidated; the last requires a complete mercurial course.

In obstinate syphilitic ulcers, fumigations with the red sulphuret of mercury (*sulfuretum hydrargyri nitratum*) or cinnabar are sometimes employed with success, when applied to the affected part.

But there are ulcers, which, though in appearance very like syphilitic ones, do not yield to the internal or external use of mercury; or which, though to a certain point they have assumed a better aspect, remain stationary, or even grow worse under the use of mercury, seem, as it were, to have lost their primitive syphilitic character, and then often become very sensible and irritable. In this case

it would be improper to continue the mercury in any form or preparation, as is commonly done from ancient routine. In several parts of this work, I have quoted examples of the afflicting and often fatal consequences of this bad practice.

A hemorrhage sometimes occurs, especially when the ulcer has penetrated into the urethra, or corpora cavernosa penis, which might become dangerous if not quickly stopped; this may be done by compression, or the injection of astringents, or of the volatile oil of turpentine, or internal use of the balsam of Copaiva.

When the swelling of the prepuce hinders the affected part from being examined, leeches may be applied, and at the same time suitable injections. If these means do not suffice, and the glans cannot be uncovered, the incision of the prepuce must be absolutely insisted on, for it is often impossible to perform a cure without this condition. In chap. viii. we have more particularly detailed the attention which this operation requires.

When ulcers become stationary or grow worse under the use of mercury, they generally affect the constitution of the patient more or less, and then often require great discernment on the part of the practitioner. I cannot enter into long details on this subject, which would lead me to a treatise on ulcers in general; I shall only speak of some means which have succeeded

in my practice in several serious cases of this kind.

Opium internally has been used with success in some of these obstinate and inveterate ulcers; it has also been applied externally, dissolved in water, or, according to circumstances, in alcohol alone, or combined with camphor, also the extract of the *conium maculatum* dissolved in water. Sometimes the saturated solution of muriate of barytes, given internally, from four to fifteen drops gradually, twice a-day, produces the desired effect; in other cases, I have found the same effect from the *lotio syphilitica lutea*; in others, in short, the *linimentum viride*, (Pharm. Syph.) applied on lint once or twice a-day, has altered the ulcer very quickly, and produced a radical cure. In the same view, some preparations of lead, as the carbonate or acetate of lead, &c. have been recommended. They are good, but require precaution; for sometimes, especially when the surface of the ulcer is large, they produce very bad effects. *Quarin* saw a case of this kind, where the penis, after the application of this remedy, lost all its natural sensibility, and was no longer capable of erection; the patient, moreover, was affected for several years with pains in the groin, perinæum, and joints, of which he was cured at length by warm baths and sulphur internally.* J. Hunter

* These pains produced by lead, must not be confounded with those vague and often alternating pains of the genitals and neighbouring parts, (the testicles, perinæum,

has advised ulcers which become stationary during the use of mercury, and some other phagedenic ulcers, to be touched lightly with the argentum nitratum; thinking it necessary that the surface, or new granulations on it, should be destroyed before the scar is formed; and says that these ulcers often heal, and cicatrise sometimes very rapidly, after having been touched only once or twice. Repeated observations and experiments can alone decide on the confidence to be given to this method. In the few cases of phagedenic ulcers in which I have tried it, it did not answer my expectations, I must even repeat, that though the application of caustics may be very useful in some cases, there are many others in which their application is followed by clearly bad effects, and even sometimes dangerous ones.

In ulcers which yield an acrid and corrosive matter, and which appear to depend on local relaxation, or which are complicated with a cachexia, or general debility of the body, mercury is almost always hurtful; it is the same with aphthæ, and other scorbutic or scrofulous ulcers. The air of hospitals, and even great towns, is very injurious to such patients.

anus, bladder, &c.), which owe their origin to strictures in the canal of the urethra, or to blennorrhagias, or syphilitic ulcers badly treated, and which resist all remedies, even a complete mercurial course, but soon and radically heal by the application of bougies.

They require healthy country air, a nourishing and strengthening diet, the moderate use of good wine, exercise in the open air, sometimes the application of caustic, afterwards astringents, such as the decoction of the root of the *tormentilla erecta*, or an infusion of bark in red wine, or lime-water, as well as the internal use of the same remedies and sea-baths. It is principally in these cases that I have sometimes found the decoction of green walnut shells excellent, applied internally and externally, after all other remedies had been applied in vain, and the disorder seemed desperate.

Sometimes it is proper, and even necessary, to assist the action of the mercury by electricity.

Phagedenic ulcers, especially those of the inguinal glands and penis, often owe their origin to the imprudent or immoderate use of mercury, and consequently are always aggravated by the continuation of it. They are often cured by discontinuing it, and by giving opium in doses, gradually increased, by beginning with one grain, then two grains a-day, afterwards two morning and evening, and at length, two in the morning, two at noon, and five at night. By this means alone, diminishing the morbid irritability and sensibility, the acrid and corrosive matter of these ulcers has been changed into a good pus, and the ulcers have cicatrised.

This morbid irritability is one of the most frequent causes which hinder the cure of primary

or constitutional ulcers; and opium, or, according to circumstances, (*digitalis purpurea*) administered internally and externally, is one of the most efficacious remedies in these cases.

In other circumstances, the application of rhubarb, columbo, quassia, or other bitters in powder, produces a speedy cure, or a lotion made with the sulphate of zinc, alone or united to camphor (see Ph. Syph.); in other cases, a solution of sulphate of copper in water, or a solution of the green oxide of copper in oil, or the same oxide triturated with honey, are preferable. I have been informed, that several sailors, on their return from Batavia, were very easily cured of ulcers in their fingers, which resisted all other remedies, with filings of fine yellow copper, with which the affected parts were sprinkled. The subacetate of copper has also been given in doses of one or two grains a-day with success.

In all other recent ulcers not syphilitic, proceeding from infection after unclean coition, or from any other acrimony, I have found that the best remedy was the application of spirit of rosemary (*rosmarinus officinalis*), or simple spirits. Lint or folded linen is dipped in the liquor, and applied on the ulcer six or eight times a-day. This remedy causes at first a little pain, but it soon ceases, and the ulcers generally disappear in a few days. I must mention here a singular phenomena which I observed in using this remedy, for the first time, for myself. It

was in summer, during the great heat, when the scrotum is naturally relaxed ; having poured a little spirit of rosemary on the glans, I felt a burning heat, which communicated immediately to the whole scrotum, with a lively sensation of heat, like hot water, and with a strong action of the cremaster muscle, in the whole circumference of the scrotum. Here was an evident sympathy of the glans and scrotum, where the action of one part produced that of one more distant ; for I felt nothing in the rest of the penis. I thought this fact remarkable, because I do not remember to have seen it mentioned any where. The use of this efficacious remedy was first communicated to me by my friend Dr. North, who used it with success in the military hospital, in the form of gargarism, in the ulcerated sore throat, and as one of the best topical remedies in all other erysipelatous ulcerations, from the beginning of their appearance.

The amputation of the penis has been advised in fungous ulcers of the glans ; but I have never had recourse to this terrible remedy. I have succeeded in some cases which were considered as desperate, by employing the remedies above mentioned, which I varied according to the state of the patient, and the nature of the disease. In some obstinate cases, I have used with success the *liquor ad condylomata*, (Ph. Syph.) by means of a pencil, once a-day, and repeated, according to circumstances, for two or three days. The same effect has been pro-

duced merely by the use of wine and bark, and the *lotio syphilitica lutea* externally, with a strengthening diet, and moderate exercise in good air. In many cases, where the end of the penis is very much swelled, the constant application of a hollow sound or a bougie is necessary, to procure a free passage for the urine, and to prevent sinuses, or fistulas, or filtrations of the urine into the cellular membrane. See also vol. ii. chap. xi. and xii.

The itching and excoriations of the glans and prepuce, which happen especially to men of a certain age, are often very troublesome and obstinate; the application of the *lotio syph. nigra* or *lutea*, commonly succeeds very well; but there are obstinate cases in which it is better to plunge the part in a solution of acetate of lead, or rub it once or twice a-day with lead ointment. Sometimes, little ulcers or pustules appear on the glans or prepuce, after the patient has felt for a day or two an uneasiness in the bladder or perinæum, or a slight dysuria, which having no syphilitic character, disappear of themselves in a few days, or are easily cured by the application of spirits of wine, or the *linimentum viride*, or by the lotions I have just mentioned.

The ulcers or excoriations which come either at the orifice or beginning of the canal of the urethra, commonly give way to the application of the *linimentum viride*. A drop or two are dropped into the canal once or twice in twenty-

four hours, and a little lint introduced afterwards impregnated with the same liquid.

Syphilitic ulcers in the rectum are very difficult to heal, because one is seldom called before they have made dangerous progress. The best remedy is the mercurial ointment, or submuriate of mercury introduced into the rectum on rollers of lint, or an injection of the *lotio syph. lutea* two or three times a-day, especially after the patient has been to stool. Opiate glysters are also very useful, but the internal use of mercury at the same time must never be neglected.

Ulcers in women, whether syphilitic or not, require the same remedies as in men. It will be sufficient to observe, that with them ulcers of the genitals are much seldomer of a malignant character than in men, and generally yield easily enough to the remedies we have recommended; only, when the ulcers in particular are very deep in the vagina, it is proper to apply the mercurial ointment every day, and to wear a bandage to prevent its running out.

There is however a peculiar disease of the vulva, which proceeds from an unknown cause, and to which young girls in the orphan hospital are particularly subject. It is a red or livid spot, which spreads rapidly, and corrodes all the soft parts to the bones with an insupportable stench. I can say nothing of this terrible complaint, which I never saw myself, but that the most powerful antiseptics have been employed. I think that the application of alcohol should be

tried from the moment it is perceived, and be repeated eight or ten times a-day.

Ulcers of the womb or vagina, attended with an acrid and ichorous discharge, are not always cancerous, as is generally imagined; they are often syphilitic, and then require the use of mercury. I have seen several cases where women who felt pains in the womb, and an ichorous discharge tinged with a little blood, led astray by those they consulted, thought they had a cancer, but have been radically cured by the internal and external use of strengthening or sedative remedies; a continued injection of bark in lime-water alone, or else mixed with the copper oxymel ointment, and a little tincture of mastic, myrrh, or assafoetida, sometimes produces excellent effects.

We must also observe here, that if the ulcers of the vagina are very large, it sometimes happens, that in cicatrising, the orifice or cavity of the vagina is considerably contracted; we should take care, therefore, in this case, to make the patient wear a pessary constantly during the cure. In this, as in many other cases, it is easier to prevent the evil than to cure it when once formed. I have seen a woman, who, from want of this precaution, had such a close contraction of this nature, that a moderate sized bougie could hardly be introduced.

In all these ulcers of women, it is of the greatest importance for the tranquillity of the

patient, and the satisfaction of the physician, to be certain of the seat of the complaint. It often happens that the patient is in the greatest distress, and thinks she has a cancerous ulcer in the womb or vagina, on perceiving a discharge of acrid, corrosive, and ichorous matter, while notwithstanding there is no ulceration in those parts, and the acrid humour is secreted in them, or deposited from the mass of blood and poured into the cavity of the womb or vagina by the small vessels, like so many emunctories. If this excretion is accidentally stopped, or by improper remedies, the patient is affected with heaviness and pains in those parts, or else feels pain in the stomach, with indigestion, anxiety, difficulty of respiration, or insupportable head-achs, and which sometimes alternate with the discharge. All these symptoms disappear by degrees, when the physician, after having discovered the nature and cause of the complaint, employs the internal remedies which are proper for the primitive disease, and topics to diminish the irritation, to defend the tender and excoriated parts from the action of the acrimony, and to help the vessels to recover the contractile force which they have lost.

But it is a mistake to hope for any advantage from injections, as they are commonly employed, either in this case, or blennorrhagias, or blennorrhœas. If good effects are to be obtained, they must be frequently applied to the part affected, and by means of a syringe made on

purpose, and consequently must not be thrown at random in the vagina, as is commonly done, in the expectation of their reaching the seat of the disorder by themselves. A leaden syringe must be used, with a pipe of a suitable size, and made so that the injection cannot escape by the sides; the patient should be laid on a bed, on her back, the head and breast a little lower than the rest of the body, and the knees bent. In this situation, the injection must be made by herself, or another person, two or three times following. The syringe must be kept in each time for some minutes, and be repeated six or eight times a-day. A syringe made of a bottle of gum-elastic, with a pretty thick cylindrical pipe, will serve equally well, and may help to destroy the unfounded prejudices that have hitherto prevailed against the efficacy of injections amongst women.

If the matter which discharges from the ulcers is so acrid that it corrodes, or threatens to excoriate the skin, recourse must be had to the white cerate, or any other soft liniment, applied two or three times a-day inside the labia, or on the thighs.

If the discharge proceeds from an abscess that has burst, or other complaint in one of the ovaria, which happens sometimes, all remedies are useless; and when the efforts of nature cannot produce a cure, a skilful surgeon might propose the extirpation of the ovary, which would be the surest method of saving the life of

the patient. The history of medicine offers several examples of the success of this operation, and proves that women have lived several years after in perfect health. It has been recently performed with equal success and prudence, by Mr. *Laumonier*, first surgeon of the hospital at Rouen; and he has recorded the interesting details of it in one of the volumes of the *Memoirs of the Society of Medicine at Paris*.

As to real carcinomatous ulcers of the genitals in both sexes, as well as in other parts of the body, the *Materia Medica*, as far as I know, affords no remedy for them; hemlock, and all other boasted remedies for cancer, appear to be the fruits of the error or dishonesty of those who recommended them. An operation sometimes cures the disorder, when recourse is had to it in the beginning, and the seat of the complaint permits it; and an honest physician, therefore, will never recommend uncertain remedies, to delude the patient, and thus make him lose the time for the only probable certain remedy, *which is extirpation*.

Of Syphilitic Fistulas.

In treating of syphilitic ulcers, we should say a word on fistulas, which are nothing but ulcers penetrating deeply in the cellular tissue, with one or more callous orifices. Their seat is commonly in the groin, perinæum, anus, &c.

They generally proceed from a bubo ill treated, or after a blennorrhagia, or from a stricture in some part of the urethra not removed in time, or because the external opening of an ulcer not having been large enough, has cicatrised before the interior was healed. Urine stopped in dysurias often forms an inflammation and suppuration, and afterwards issues in the cellular tissue, which are called sinuses as long as they have no external opening, and fistulas or fistulous ulcers when the opening is formed. The febrile symptoms which appear with fistulas, are like those with buboes, entirely symptomatic, and disappear only with the cure of the fistula. Pus readily forms in these parts, and an emollient cataplasm applied for some hours, will soon soften the hardness and dispose it to an abscess. When the abscess is formed in the perinæum, it must be speedily opened to avoid the fistula.

Independent of mercury internally, and the continued use of bougies, which often cure fistulæ radically, warm baths should be tried, continued every day for several months, and the lotions recommended above in form of injections; but above all, the opening of the fistula should be made as wide as possible, which sometimes will cure it without any thing else. A bougie introduced into the fistula sometimes produces a supuration, which leads to a cure; but if these means do not succeed, an operation becomes necessary. It should never be practised however, till the syphilitic virus is completely eradi-

cated from the system. From the neglect of this essential point, we daily see patients obliged to undergo the operation two or three times without success. The fistula remains as obstinate as before, or if cured in one place, it soon appears in another. If the fistula heals quickly and perfectly after the operation, it is a certain sign that it has been well done, and that the patient is radically cured of the syphilis.

To perform this operation, the patient should be laid on the edge of the bed, and on his side, his thighs should be raised, while an assistant holds his knees firm, and another separates the buttocks from each other. If an artery should be wounded, which would be known by the hemorrhage, the assistant must apply lint on the wound, and keep it pressed down for a couple of hours. The fistula must be opened to the very bottom, so as to expose all the ulceration to view; but care should be taken to cut as little as possible of the sound part of the surface of the urethra. With men, a sound is introduced into the urethra, and a stilet into the fistula, to discover the seat of the primitive abscess. If the sound and stilet cannot be found to meet, we must cut till the whole fistulous canal be opened, and even across the whole sinus which leads to it. If the abscess is situated near the prostate, it is often necessary to cut in the urethra on both sides of the contraction, and then a greater part of the urethra being opened, the cure of the stricture will be easier. In this case, a catheter or hollow sound

must be constantly kept in the urethra, to accelerate the cure of the fistula or open sinus. It has been observed however, that there is a certain time for keeping the sound or bougie in the urethra; beyond which, instead of facilitating the cure it hinders the cicatrising of the ulcer. It must be drawn out, therefore, as soon as it produces irritation, or the ulcer becomes stationary, and only be introduced sometimes; but after the cure is effected, the patient should be allowed to continue the bougies for a certain time. The ulcer should be dressed to the bottom, so as to prevent the re-union of the parts that have been cut, so that the regeneration may spring from the bottom, and procure a good cicatrix. For every thing else, what I have said of syphilitic ulcers is applicable to the treatment of fistulas.

Dr. Darwin makes mention of a urinary fistula in the perinæum, by which a part of the urine ran out every day, attended by severe pains which reduced the patient to a great degree of weakness, but he was perfectly cured of those complaints by a mere warm bath of 97° Fahrenheit, for half an hour every day for six months together.

I have seen a case of urinary fistula, in which, after several means had been tried without success, the powder of *digitalis purpurea* mixed with flour and applied in the form of a cataplasm, produced in a short time a complete cure.

The *fistula lachrymalis*, which proceeds from

the syphilitic virus lodged in the lachrymal sac, sometimes yields a puriform greenish-yellow discharge, like that from the urethra in blennorrhagia ; in some cases that have been very much neglected, or irritated by bad treatment, a real ulcer is formed ; or as Pott has well observed, the cavity of the lachrymal sac is filled with a softish fungus of a bad character, which throws out a great deal of sanies. I cannot positively say, if it is ever the effect of the suppression of a syphilitic blennorrhagia, like some ophthalmias ; but it sometimes arises from a general infection, and in that case is often attended with a caries of the bones. The fistula lachrymalis is then only a secondary disease ; it is a consequence of the morbid state of the ethmoidal bone or of the vomer, or of the spongy bones of the nose ; it cannot be cured by any local remedies, without having previously employed a complete mercurial course.

CHAPTER XIII.

OF THE TUMOURS OF THE LYMPHATIC GLANDS IN
GENERAL, AND OF BUBOES IN PARTICULAR.

THE word *Bubo* has been employed hitherto for every swelling of any lymphatic gland whatever, tending to suppuration. The absurdity of this denomination is evident, if the Greek etymology of the word be consulted, which signifies the groin or *inguen*. When it was applied to the swelling of the inguinal glands only, it might be allowed, though many other tumours happen in the inguinal region, of a very different nature from the swelling of the glands : but the word becomes absolutely improper and absurd, when it is employed to signify the tumour of a lymphatic gland in the other parts of the body, as under the armpits, arms, or legs. For this reason, in my *Nosologia methodica*, to indicate the inflammatory tumours of any gland whatever, I have substituted the word *Phygethlon*, which had been employed by the Greeks to characterise this disorder.

Though these tumours may arise in any part of the body where there are lymphatic glands,

we have no authentic observation to prove that the syphilitic virus has ever originally attacked any other lymphatic glands than those of the groin, armpits, and extremities. The first are the most common, because the genitals are the most frequently exposed to the contact and absorption of the syphilitic virus, and that the glands of the groin being those nearest to these parts, are most exposed to the action of the same virus. It is principally to the modern discoveries of anatomists on the lymphatic system that we owe the exact knowledge of the origin and nature of these tumours.

Buboes or tumours of the inguinal glands owe their origin most commonly to the syphilitic virus applied to the surface of the genitals during coition, which by remaining there produces a strong irritation, followed by an ulcer, from which the virus is absorbed more or less speedily by the orifices of the absorbent vessels, which carry it into one or more of the inguinal glands in which they terminate; or else the virus being lodged on the surface of the body, and merely irritating in that part the orifices of the absorbent vessels without being absorbed by them, this irritation produces a swelling in the same glands which gives rise to an essential distinction in practice between idiopathic and sympathetic buboes. In the first, the cause of the complaint is lodged in the gland itself; in the second, it is out of it. For want of attention to this distinction, serious errors have been and still are com-

mitted in practice; but it is absolutely necessary in order to regulate the method of treatment.

It must also be remarked, that these tumours, particularly of the inguinal glands, are often solitary, and only on one side; at other times on both; and sometimes several inguinal glands, as well as those of the penis and scrotum, swell, inflame at the same time, and end by suppurating.

I believe that syphilitic tumours of the inguinal glands proceed sometimes from the virus spreading through the body, though several modern writers deny it. I have several times observed swellings of the glands, though the patient had not exposed himself to any infection; and in two of these cases, the patients had not seen a woman for several weeks, but they had had the syphilitic disease some months before.

According to these observations, these tumours of the lymphatic glands, especially inguinal, must be distinguished into *primary* or *original*, and *secondary* or *symptomatic*, that is, into tumours proceeding from immediate infection, or produced by the virus in the system; a distinction which, as we shall see later, is of use in practice.

Experience confirms that the idiopathic tumours of the inguinal, subaxillary glands, &c. proceed not only from the absorption of the virus from an ulcer in the genitals, but from any syphilitic ulcer in any part of the superior or inferior extremities of the body. I shall relate some examples to elucidate this theory.

I had the misfortune in my youth to be attacked with syphilitic ulcers on the glans. As I was travelling, I took some mercurial pills, but the ulcers having disappeared in ten or twelve days, I left them off, and had no complaint for six months. At the end of this time, I was awoke one night by a violent itching on the right elbow, and the same the next night; but feeling nothing in the morning, I did not think of examining the part, but the itching having returned more violently the third night, on examining the part in the morning, I found my shirt stained in that part with a greenish-yellow matter like that of a blennorrhagia, and at the same time I found my elbow covered with a yellow thick crust, or a sort of herpes. This struck me, but being on a journey, and thinking it might go off, I deferred using any remedies; two days after I perceived a swelling under the armpit, which in three days increased so much, that I was obliged to keep my arm at a considerable distance from my body. I had no longer any doubt, as may be easily imagined, on the nature of my complaint. In a few days, by means of mercurial ointment, applied on the elbow twice a day, the tumour in the gland under the armpit was dissipated, and by following a mercurial course, I considered myself perfectly healed in a few weeks.

About fifteen months after, being exposed to snow and severe cold, I felt a pain which I thought rheumatic in the middle of the sternum. On this supposition, I rubbed the affected part

morning and evening with flannel, by which the pain went off, but two days after in the morning I felt a very unpleasant pain in the great toe, and second toe of the left foot. I rubbed the parts with flannel, but I perceived the night after, that the pain had returned to the sternum, from which being driven off again by the same friction, it fell again on the same part of the foot. I then began to suspect it might be gout. Being obliged to go out that day, I bathed my foot in warm water, and cut a corn which I had long had on the second toe affected. In doing this a few drops of blood came, when I stopped immediately; but examining the part next day, I found a little suppuration, and covered the wound with a bit of clean linen. The evening of the next day, I began to feel on the groin of the same side a slight pain, which continuing the next day, and being followed by a tumour in one of the inguinal glands of the size of a pigeon's egg, made me think, for the first time, that the pain of the sternum and all the rest might be of a syphilitic nature; and that when the toe was hurt and suppurated, the virus had been absorbed by the lymphatic vessels, and carried to the first gland they met, which in this case was one of the lower glands of the groin. The ulcer of the toe still continued, but it was very small, and yielded a purulent matter. I put a mercurial plaster on it, and made mercurial frictions twice a day on the inside of the thigh and leg affected; in four days the ulcer healed, the tumour of the ingui-

nal gland was dissipated, and by continuing the frictions from twenty to thirty days following I was radically cured.

Some years ago, a famous accoucheur in London was called to deliver a woman, who, without his suspecting it, had syphilitic ulcers in the genitals. He got very troublesome and obstinate ulcers in the hand, and a tumour in the lymphatic gland situated in the interior of the forearm.

Sympathetic buboes owe their origin not to the absorption of the virus, but to an irritation of the orifices of the neighbouring absorbent vessels. This sort of bubo is often seen in blennorrhagias, or else when one of the glands is affected idiopathically; we see two or three of the contiguous ones will sometimes swell by sympathy. In this case however, it is only that or those which are really affected which continue to swell, while those sympathetically affected always remain in the same state, or augment very little, and very rarely come to a suppuration, and disappear at length, as soon as the neighbouring irritation is calmed; provided always, that the patient does not irritate the affected gland by touching and pressing it, and this occasions a real inflammation and suppuration.

I say that sympathetic buboes disperse spontaneously as soon as the neighbouring irritating cause is destroyed; and it is certainly this sort of bubo which quacks sometimes appear to dissipate in a few days with their pretended oint-

ments or secret plasters; while on the other hand, patients are often heard to complain of the best physicians, because they have not succeeded in resolving a bubo. If patients however knew the difference between their actual complaint and that of the bubo they previously had, they would probably find, that in the first case, their cure was not to be attributed to the ointment or plaster of the quack, but solely to the nature of the disorder; while in the latter case, great skill and constant attention are necessary either to resolve a bubo or to cure it after attempts to resolve it have been unsuccessful.

Several authentic observations in my practice have also convinced me, that buboes in either sex sometimes arise from immediate absorption, without being preceded by any excoriation or ulcer in the genitals, or any other part of the surface of the body; though this has been contradicted by some modern authors. Some years ago three soldiers came into a military hospital in one week, all attacked with a bubo, which they had got from the same woman; they had all been in perfect health a few days before, and none of them had on his arrival the least excoriation in the genitals or thighs, nor even any appearance of a discharge from the urethra. I have seen several other similar examples since.

I do not pretend to determine if this immediate absorption is to be attributed to a sort of torpor of the lymphatic vessels, or to a less degree of irritability of the absorbent system, or

rather to a more volatile, or perhaps a more diluted virus. It is this immediate absorption of the virus, which may take place when we expect it least, and renders all prophylactic precautions not only precarious, but very often useless; for though employing the best preservatives against blennorrhagias and chancres, we are still exposed, for this reason, to buboes and even syphilis.

With respect to tumours of the inguinal glands as well as the lymphatic glands under the arm-pits, or any other part of the body, the general observation must not be forgotten, which we made respecting all syphilitic disorders; which is to distinguish well those tumours that are truly syphilitic, from those which proceed from any other cause, as scrofula, pestilential miasmata, &c.

I also think it necessary to make another distinction of these tumours, particularly in the inguinal glands, which seems to me of the greatest importance in practice, by dividing them into *sthenic* and *asthenic*; which I conceive to be the best denominations for these two sorts of buboes.

That which I call *sthenic* is accompanied with evident symptoms of inflammation, often very violent, and attended with a quick, full, strong pulse. In the *asthenic* bubo, the contrary is observed. All the symptoms denote a great degree of weakness or irritability, and are often attended with a weak and very quick pulse.

The fever in both is symptomatic, and clearly indicates the nature of the principal disease. In the first, the inflammation and suppuration are confined to the gland, and advance rapidly; in the second, the progress is weak and slow; or if rapid, it is that the inflammation and suppuration extend to the surrounding parts. The sthenic bubo is red, the asthenic is more of a purple colour. An attentive physician would be tempted to attribute them to different causes, so much do they differ in their nature, and in the treatment they require. A modern writer has distinguished these two species of tumours into inflammatory and erysipelatous; but I think this denomination too vague, as it does not give so clear an idea of these complaints, nor of the method of cure, as the distinction of sthenic and asthenic. The latter has often been confounded with the scrofulous bubo; but I must observe, that the word *scrofulous* has often been used of late, like *malignant fever*, *nervous disorders*, *bilious* and *scorbutic complaints*, not to indicate the nature of those particular disorders, but to conceal ignorance of the real nature of the disease.

Having thus established all the essential distinctions between the different syphilitic tumours of the lymphatic glands, I should now proceed to the method of treating them; but I think it will be useful, and perhaps even necessary, to examine and discuss beforehand some prejudices,

which are pretty general, concerning the nature of these swellings.

Many persons, particularly in the southern parts of Europe, consider it as a dangerous practice to resolve or dissipate a syphilitic bubo. This prejudice arises from the idea, that by this means the virus is thrown back into the system, and occasions a general infection ; whereas if the bubo healed by suppuration, they imagine not only that this infection is not to be apprehended, but that on the contrary, in case any virus should have been absorbed during the formation of the abscess, the suppuration would expel both the virus contained in the gland, and that which might have been absorbed. According to this reasoning they conceive the abscess to be a sort of drain, by which the body is entirely cleared of the virus. This opinion, besides being perfectly erroneous, may be hurtful to the patient, at least by depriving him of a benefit which without that he might enjoy. I must therefore make two remarks on this subject ; first, that by mercurial frictions, not on the gland as formerly, but on the inside of the thighs or legs, or sole of the foot, in the manner related hereafter, the resolution of the bubo can never occasion the retropulsion of the virus into the system ; and that on the contrary by following this method, the virus is often destroyed in the gland itself. The second is, that even though the virus should be thrown back, and absorbed into the system,

such a retropulsion would be still preferable to a suppuration.

To place this matter in the strongest light, and to explain distinctly how frictions applied in the improved modern practice act, the anatomical discoveries lately made on the system of the absorbents should be thoroughly known; which will easily show what must be the effect of mercurial frictions applied as I shall mention hereafter.

From these anatomical observations, but particularly from *Hewson's* plates, and those since published by *Mascagni*, we learn that the lymphatic or absorbent vessels begin on the whole surface of the body by the smallest ramifications; that ascending from the lower extremities, they unite by degrees into larger branches, which terminate at length in the inguinal glands, into which they seem to pour the liquid, which they have absorbed on the surface by their extremities. This liquid, which in its natural state is only water, or a mild lymph, more or less diluted with water, after having been deposited in the lymphatic glands of the groin, is absorbed anew by other lymphatic vessels, which carry it to the abdomen, and thence pour it by the thoracic duct into the blood. Supposing therefore that a portion of the virus has been absorbed by the lymphatic vessels of the genitals or inferior extremities, and consequently has been carried together with the lymph into one or more of the inguinal glands; the virus, being once there, will be taken up by

the opposite absorbent vessels, and carried into the mass of blood; or what happens more frequently, it will excite an irritation in the gland by its acrimony, which will not only prevent its proper absorption by the opposite vessels, but will also produce a swelling or inflammation, called a *bubo*. In these circumstances, the best thing to be done is certainly to destroy radically the virus lodged in the gland, if possible.

But, not to insist on the experiment of Dr. Harrison, who by triturating matter impregnated with the virus with oxide of mercury, rendered it perfectly mild and inactive, it is known that mercury is the only specific for destroying the effects of the syphilitic virus. The question therefore is to bring it into the affected gland. Preceding practitioners certainly had recourse to mercury, and imagined, for want of anatomical knowledge, that they could introduce mercury into the gland, by rubbing mercurial ointment on the gland itself. But instead of obtaining the desired effect thereby, that is, a resolution of the bubo, they found that in general it was the more inflamed, afterwards suppurated, and sometimes even ended by gangrene. The fact is, that by this means mercury is not introduced into the affected gland, or if that happens from time to time, it is by mere chance; for the absorbents, which go off from the skin with which the gland is covered, do not take their course towards the substance of the swelled gland, but obliquely towards the abdomen.

Hence the good or bad effects in this case are not to be attributed to the mercury, but rather to the mechanical irritation occasioned by the frictions; which would probably have been produced just as much by any other ointment employed in the same manner. But if, on the contrary, instead of frictions with the mercurial ointment on the gland itself, it is done on the sole of the foot, or inside of the thigh or leg of the affected side, it may be expected, from the course of the absorbent vessels, that the mercury will be absorbed by their extremities, and thence be carried to the affected gland, where meeting with the virus, it will efficaciously exert its specific power upon it. The success which I have had with this method has convinced me of the truth of the theory. For if the frictions be properly applied, and in time, that is, before the inflammation has made too much progress, the virus fixed in the swelled gland is thereby often destroyed, or so much altered as to be no longer capable of irritating it further, and the tumour disappears. I have never observed that the virus thus altered, and afterwards absorbed jointly with the mercury, ever produces afterwards any syphilitic symptom in the system.

But even supposing that the mercury has not changed the nature of the virus lodged in the gland, and has driven it into the blood, as patients commonly think; what will be the consequence? The same no doubt, if we may use a

metaphorical expression, as when a victorious hero expels an enemy and drives him flying before him. The same remedy which has driven the virus out of the gland into the system, will pursue it and expel it entirely, or render it, in one way or other, incapable of injuring the animal economy afterwards.

To elucidate this interesting subject still more, I must answer a question I have often heard proposed; namely, why mercurial frictions on the extremities do not always resolve the bubo in all stages of the disease? we must again have recourse to anatomy for the solution of this problem. We learn from it that there are two series of lymphatic glands on each side of the groin, which are distinguished into superior and inferior inguinal glands. In most persons there is a communication between these two orders of glands. In this case, the absorbents of the inferior glands communicate with the superior glands, from which other absorbents proceed again which take their course across the abdomen towards the thoracic duct; but in some persons there is no such communication. The absorbents of the inferior inguinal glands go directly towards the abdomen, without communicating with the superior glands. But the virus, being absorbed by the lymphatics of the genitals, is commonly carried by their means to the superior inguinal glands, where it produces the bubo: consequently, whenever the absorbent vessels meet directly with the affected

gland, or the inferior inguinal glands have the communication just mentioned with the superior ones, mercury rubbed on the lateral and internal part of the thigh or leg, or sole of the foot on the side affected, will be absorbed and carried directly to the swelled gland; or to the inferior inguinal glands, and thence to the superior, where it will produce the desired effect; provided always, that the obstruction of the affected gland still leaves a free passage to the fluids. But on the other hand, when there is no communication between these two sets of glands, and the virus occupies one of the superior inguinal glands, the mercury carried to the inferior ones, and thence to the abdomen, without ever reaching the affected gland, can produce no effect.

The same thing must happen when the inflammation of the bubo is too far advanced, or when a hard tumour has been formed in the gland; the mercury, in this case, can have little or no access to the part, or if it reaches it, can have but very little action on the disease.

But let us go farther, and suppose that the method we have indicated has not been followed, and that instead of it, it has been attempted to calm the irritation, and that the absorption of the virus in the gland has been effected by sedatives or resolvents, what will be the consequence? I answer that, instead of a bubo, the patient will have the syphilis, which can be easily cured in a few weeks as it is recent;

while a bubo is sometimes very dangerous, often extremely obstinate, and always very tiresome to cure. Add to these considerations, that even when the suppuration and abscess are of the best kind, which however is far from happening always, the virus, instead of being completely evacuated by the opening of the abscess, is, if not always, at least very frequently absorbed into the system, and thus really produces the disorder that was intended to be avoided; and the patient is obliged at last to have recourse to a mercurial treatment, to which he was unreasonably afraid to submit sooner.

METHOD OF CURE.

It follows from these observations, that every enlightened practitioner will always endeavour to resolve tumours of the inguinal glands or others of a syphilitic nature as soon as possible, by any method whatever, provided the inflammation has not run too high, or no signs of suppuration have appeared. The most efficacious means of resolving tumours of this kind, is, as I have already observed, to make mercurial frictions on the inside of the thigh or leg, or on the sole of the foot of the side affected. To insure success, mercurial ointment may also be applied on the genitals, from which the virus was originally absorbed. For this purpose, the common grey mercurial ointment made with

equal parts of hog's-lard and mercury is used, or else an ointment prepared with the lard and submuriate of mercury. The late Dr. *Cyrillo* of Naples has also recommended, for the same purpose, the oxymuriate of mercury triturated with hog's-lard in the form of ointment, but the disagreeable consequences of this application, which I have mentioned in the second volume of this work, render it very dangerous. Experiments lately made with the oxygenated ointment had no satisfactory result.

If the inflammatory symptoms are violent, it is certainly useful to perform a general or local bleeding, and use a cooling regimen; but this should not prevent the attempt at resolution in the manner pointed out. I have no fear, like some authors, of increasing the irritation from the virus by the stimulus of the mercury; for as soon as a small portion of the mercury has entered the gland, the irritation is calmed and dissipated, I have observed in myself, that from that moment the gland becomes less painful and less hard, the swelling diminishes and disappears entirely in a very short time. As to what a modern author has lately asserted, that it is as advantageous, and even more so, to make the frictions on the thigh or leg of the opposite side of the affected gland; this appears to me devoid of all probability.

In order to make the mercury pass either by the same absorbents, which the virus has crossed or as near to them as possible, and to obtain the

greatest benefit from its effects, the surface on which it is applied should be as large as possible.

The tumours of the glands of the groin have different seats according to the different position of the inguinal glands. To understand this well, the young practitioner should consult the anatomical tables of *Mascagni*. In most cases, it is the absorbents of the penis or vulva; in others, those of the groin or thigh, which carried the virus to the gland. These observations point out the place where the friction should in preference be made to effect the resolution.

When the seat of the complaint is in one of the superior inguinal glands, we may conclude, that the absorption took place by the penis; it would therefore be useful, besides the frictions on the thigh, to apply mercurial ointment constantly to the member itself, by means of a little bag, as I have shown in the treatment of syphilitic ulcers; and with women, on the inside of the great labia; the motion of the body during the daily exercise excites a friction of this part, which singularly favours the absorption of the mercury in the system; or if it be preferred, the submuriate of mercury in powder may be applied with saliva between the glans and prepuce. If the bubo is in the inferior part of the groin, the leg and thigh, or sole of the foot, present a broad surface for the frictions. When the tumour is in the lower part of the belly, besides the frictions mentioned, they must be also made on the penis, scrotum, and groin.

The inguinal glands in women being mostly situated near *Poupart's ligament*, or between the great labia and the thigh, or in the groin, besides the frictions on the thigh, or sole of the foot, it is proper to apply the submuriate of mercury to the interior and exterior of the great labia.

If the lymphatic gland of the fore-arm is the part affected, the frictions must be made on the hand and wrist; if it be that of the armpit, they must be applied all over the arm and elbow.

But as the object of these frictions is to procure a resolution, and the chance of success is consequently limited to a few days, they must not only be done with great care and attention for a whole hour, and in winter near the fire, but if circumstances permit, must be repeated twice a day. About a drachm of mercurial ointment must be used each time. It is proper to continue these frictions after the tumour has disappeared, and even till the mouth is affected.

If notwithstanding this the tumour does not resolve, and a suppuration is formed, mercurial frictions in this manner can have no bad effect, at least I never saw any; and I cannot conceive how a few frictions in the space of a few days (for the resolution is not to be expected by frictions after that time) can become the cause of a malignant ulcer, as some writers have maintained. I confess this fear seems to me chi-

merical, and only founded on this theoretical opinion, *that mercury only resolves buboes by acting on the whole system of the body.* This opinion is evidently contradicted by daily experience. I cured myself twice of a bubo, and once of a tumour of the axillary gland, in three or four days by mercurial frictions in this way, and I have also cured a great many persons in the same manner.

If this be compared with what I have said in the preceding chapter, that primitive syphilitic ulcers may be cured by the simple local application of mercury, my opinion will be found to be still more probable; namely, that mercury produces its effects by acting immediately on the virus, independently of the effects it produces on the constitution.

Besides mercurial frictions there are other means of resolving buboes; which are a severe regimen, strong and repeated purgatives, the application of snow or ice, or a cold cataplasm made of crum of bread and the liquid acetate of lead (*Lotio Plumbata* Ph. Syph.), or linen steeped in oxycrat, and applied every hour. If these means do not succeed, an emetic is sometimes given with success, repeated for two or three days; buboes have been resolved in this way that were ready to break. If the inflammation is considerable a general or local bleeding previously is sometimes useful; in other very obstinate cases, the decoction of the bark of the *daphne mezereum* taken internally for some

days has produced the desired effect. In such cases, dry cupping-glasses on the swelled gland have been used with success in the Edinburgh infirmary.

Dr. Nooth saw the resolution of a bubo produced in several cases, by a friction with the ammoniacal liniment on and round the gland repeated once or twice a day, for eight or ten minutes each time.

From observations in London by Birch, it appears that gentle electric shocks passed through the thigh and gland affected, greatly increase the action of mercury in resolving buboes, and sometimes produce it without mercurial frictions even when the swelling and inflammation are very much advanced.

During the whole time that the resolution of a bubo is attempted, the patient should abstain from exercise, and confine himself to a very strict diet, as a contrary regimen would increase the inflammation. With respect to mercurial frictions on the gland itself, I have already given the reasons which make me disapprove of them. In fact, most of the idiopathic buboes which I have seen treated in this manner became inflamed and suppurated, though the frictions were used to prevent this unfavourable termination. There are now very few practitioners acquainted with the new discoveries on the system of the absorbent vessels, who would rely on such means to procure the resolution of a syphilitic bubo.

When I say that mercurial frictions, or a stimulant plaster on the gland itself will be sooner followed by inflammation and suppuration than by resolution, I speak expressly of idiopathic syphilitic buboes; for sympathetic buboes may certainly be dispersed by those remedies. Notwithstanding, as I have observed above, their resolution must not be attributed in this case to mercurial frictions, nor cataplasms, plasters, &c., but to the simple operation of nature; for sympathetic buboes almost always disappear of themselves without any topic or remedy whatever. Nothing more need be done to dissipate them, than to destroy the irritating stimulus, or to remove it from the orifices of the lymphatic vessels. This fact is sufficient, in my opinion, to prove of what importance it is to distinguish in practice idiopathic from sympathetic buboes.

If, four or five days after the use of the frictions properly made, the bubo does not resolve or no hope remains of it, the frictions must be given up, and the treatment altered.

One may know that a bubo will not resolve, when the tumour continues to increase, and becomes red and painful, though mercurial frictions and other resolvents have been employed for four or five days. As soon as all attempts to procure a resolution appear useless, the necessary means must be adopted to bring on a suppuration as gently and as quickly as possible. Here however we often meet with

great difficulties. Buboës are so different from one another, that the treatment which one requires for a suppuration, in another will often occasion dangerous consequences.

Here above all we have occasion to appreciate the distinction of buboës into sthenic and asthenic.

In the first kind, which is truly inflammatory, the symptoms often advance so rapidly, and are so violent, that they threaten gangrene. In this case all our efforts must tend to moderate and weaken the inflammation. In the asthenic bubo, on the contrary, we see the symptoms of great irritability or weakness; the strong symptomatic fever, the quick and weak pulse, the prostrated strength; the gland moreover is of a purple colour, and the swelling very extensive. In this case, the irritation must be calmed, and the strength of the patient supported by a fortifying regimen, good air, and, according to circumstances, by opium, wine, or bark. In other cases, there are no febrile symptoms; the pulse is weak; the progress of the swelling is slow, and the gland remains hard and indolent, showing no disposition to inflame or suppurate. Here the gland must be irritated and stimulated to procure a suppuration or absorption by external remedies on the gland itself, as mercurial frictions, the ammoniacal liniment, &c., which may be assisted with repeated emetics or purgatives.

After the resolution of a bubo has been tried in vain, or the inflammation has already made

great progress, we must then endeavour to aid nature in the work of suppuration. For this purpose, the physician in many cases should do little or nothing if the degree of inflammation is such as to produce a speedy and mild suppuration. In most of these cases, a simple cataplasm made of crum of bread, or linseed flour, milk, and a little oil or hog's-lard, or an emollient plaster applied to the part, is sufficient.

In the case where the symptoms of inflammation are very violent, as we often see in strong robust men, a copious bleeding is necessary, repeated according to circumstances, or leeches applied round the swelling, or else scarifications, and a very strict antiphlogistic regimen.

On the contrary, when the symptoms of irritability are strongly marked, as often happens in delicate and irritable persons; when the symptomatic fever is very considerable, and the pulse very quick and weak; when the swelling, instead of being circumscribed, becomes very extensive and of a red purple colour, the antiphlogistic regimen instead of relieving would only increase the complaint; and general evacuations, instead of being useful, would be really prejudicial. In this case therefore we must allow the patient to take more food with a moderate use of wine; bark must be given, opium every night, and spirituous fomentations, which in these circumstances are the most suitable remedies. I must here make a general remark, which is, never to give mercury internally, and still less externally,

on the part affected, (except in frictions as recommended above to attempt a resolution,) during the inflammatory state of a bubo, or any other syphilitic affection; for I never observed mercury do the least good in this stage; on the contrary I have often seen it produce very bad effects, especially when employed in frictions on the inflamed gland. To this class may probably be referred the case which *Brambilla* cites of a young man, who died of a bubo that became gangrenous, after he had taken for some time the submuriate of mercury with a strong decoction of the woods.

When the bubo is rather of an indolent character, its progress slow, unattended with fever, as is frequently observed in phlegmatic, indolent, or debilitated constitutions, or in aged persons, after all means to favour resolution have been tried in vain, a cataplasm may be applied of the root of *atropa mandragora*, or of *bryonia alba*; and, if that does not succeed, mercury must be administered with a nourishing diet, and the use of wine. Sometimes good effects are experienced from bark with wine, or other fortifying and aromatic remedies; to which may be added the local application of stimulants more or less active, as gum-plaster, or a cataplasm of broiled onions, or boiled in oil, the ammoniacal liniment or caustic potash.

In cases where buboes are attended with scrofulous or scorbutic symptoms, mercury must never be used, but such remedies as are suitable to either of those complaints.

When by these means or any other method, the bubo is at length suppurated, several authors advise the abscess to be opened with the lancet or caustic. I am convinced that in most cases it is better to leave it to nature. In fact I have seen that in general nature left to herself seldom fails to make an opening in time, while artificial openings are often made before the time, that is, before the abscess has acquired maturity. I have also found another advantage in letting nature act, which is that abscesses opened of themselves consolidate in general much more easily, and much better than those which are opened by incision, or the application of caustic. These have often troublesome consequences; the cure is painful and tedious, and they leave great scars, which should always be avoided, particularly in women, for evident reasons. When nature is allowed to act it is observed, that the abscess commonly opens only by two or three little holes, when the gland has entirely suppurated, and soon after a scar is formed, which in a little time is scarcely visible, or even disappears at length entirely.

Nevertheless there are particular cases in which it may be proper to assist nature, either by dilating the opening she has made, or by making an artificial opening.

I must make mention here of a particular sort of buboes, which having resisted resolution, have by means of emollient cataplasms become soft, and indicated a complete suppuration,

without any external application; nevertheless on opening them by incision or perforation, I was quite astonished to see a discharge of pure blood instead of pus. All the patients affected with buboes of this sort whom I have seen were quickly re-established after this operation.

There are buboes which remain indolent, and show no disposition to suppurate. In these cases, particularly if the patient neglects himself, the bubo becomes very hard, or ends at last in a very disagreeable ulcer. To prevent this accident, two or three purgatives must be administered, and at the same time a plaster of *belladonna* applied, or stimulant and irritating remedies; a gum plaster broad and thick, applied to a gland thus hardened, sometimes has an excellent effect. In more obstinate cases, a piece of argentum nitratum or caustic potash, of the size of a little pea, is often applied with success in the middle of the hardened gland; it is left there for two or three hours, and after having taken off what remains, the eschar is dressed with a little ointment, and the same plaster above mentioned is applied, or, according to circumstances, an emollient cataplasm, which is continued till the tumour is entirely dissolved.

In all cases, as soon as the abscess is broken, a hole is made in the plaster opposite the opening of the abscess, to leave a free issue to the pus, applying on the opening some lint, or a piece of fine sponge, which is covered with

linen, or an agglutinating plaster. The same rules must be observed in all buboes opened by nature or art.

But it is not sufficient to procure a free discharge to the purulent matter, we must also hinder it from producing sinuses or fistulas, by penetrating into the cellular tissue of the groin, or towards the lateral or inferior parts of the thigh. To prevent this accident the abscess must be dressed two or three times a day, and the surrounding parts of the affected gland be gently pressed towards its centre, so as to evacuate each time all the matter; and where this is not sufficient, the same effect must be attempted by an appropriate compression and bandage.

I must remark here that the method employed of applying a large caustic on a bubo, and leaving it for ten or twelve hours, to bring it to a suppuration, is generally followed by bad consequences. I have twice seen gangrene result from it, and at other times very large and very bad ichorous ulcers. In one case the ulcer became phagedenic, and caused the death of the patient. But I never saw the little caustic above mentioned followed by similar accidents.

When the size of the tumour and the violence of the symptoms threaten mortification, the most active remedies must be applied in time; and it is in these circumstances especially that the state of the patient and the nature of the disease must be distinguished, in order to make

use either of the purely antiphlogistic method, or of fortifying or sedative remedies, according as the symptoms of real inflammation, or those of weakness or irritability predominate.

When the abscess has been opened by nature or art, the disease is then called an ulcerated bubo, in the treatment of which the distinctions established above must never be lost sight of, if we wish not to be deceived by the event.

It is commonly advised in this case to give mercury both internally and externally, and thus to treat it as a syphilitic ulcer. This practice is undoubtedly good in many cases; but in certain circumstances, it may be hurtful, and even give rise to very dangerous symptoms.

No general method can be prescribed for the treatment of an ulcerated bubo. The physician must be directed by the nature of the disease, and the state and constitution of the patient. If he be vigorous and without fever, if the pus is of a good consistence and a mild nature, no topic seems necessary; it is sufficient to cover it with lint, or dress it with a sponge, as I have said above, in speaking of syphilitic ulcers, in order to facilitate as much as possible the discharge of the matter; and in case any hardness remained, the continuation of the same cataplasm, which favoured the suppuration, will certainly advance the cure more than any other remedy.

If mercury be judged proper, mercurial frictions may be made on the affected side, or, ac-

cording to circumstances, it may be given internally, both to promote the healing of the ulcer, and destroy the effects on the constitution from the absorption of the virus.

I have seen many ulcers of this kind cicatrise speedily without any remedy, at which I was much surprised in the beginning of my practice, because the inflammation, suppuration, and ulceration, were evidently the effect of the syphilitic virus; I could only account for the mildness of the symptoms, by supposing that it was owing to the small number of frictions which I had prescribed to all my patients at the beginning of the disorder, in order to obtain a resolution of the bubo; and that a little mercury had got into the gland and destroyed the virus, though it arrived too late to prevent the suppuration. The mercury must be continued some time after the ulcerated bubo is healed, provided its nature and the constitution of the patient does not forbid it. Some practitioners have thought that the application of mercury on the ulcerated gland itself might be useful; but much prudence is necessary, for fear of giving rise to a disease worse than the primitive one, of which I have seen many unfortunate examples. One will suffice.

A young physician of my acquaintance, of a sound, strong, and vigorous constitution, was attacked with a bubo, caused by the absorption of the virus from an ulcer of the glans; the inflammatory symptoms were very violent; the

abscess opened of itself by a little aperture, and suppurated longer, in greater quantity than was expected, from the use of the mercurial remedies. The patient growing tired one day, took a solution of mercury in gum-arabic, which he had been using internally; and hoping to hasten the cure, he injected a small quantity into the abscess. A terrible inflammation followed, which not only terminated by the mortification of the affected gland, but also by gangrene, which extending to all the inguinal glands of the same side, spread even under *Poupart's ligament*; all these mortified parts, together with the skin, fortunately came off in eschars, and the patient's life was saved.

Dr. *Riffer* of Wisbaden says, he has tried with great success, in ulcerated, indurated, inveterate and obstinate buboes, as well as in scrofulous ulcers, the application of the red garden-snail. They are applied under a piece of linen, and the patient soon gets accustomed to the disagreeable sensation which their continual motion occasions. They are renewed every morning. He obtained the same effect from bruised snails applied in the form of cataplasm. In a very few days, the hardness of the gland diminishes, the edges of the ulcer come near, and at length close entirely.

There are other kinds of ulcerated buboes which practitioners have entirely neglected, or at least have not considered sufficiently. Sometimes the abscess, instead of healing, seems to

remain for several weeks in the same state, though the use of mercury has been continued; or it appears relaxed and soft; the discharge becomes abundant and ichorous, and at the same time, the health of the patient, instead of improving, gets worse from day to day. These circumstances require all the attention and talent of the physician. It is wrong to attribute such symptoms to the inefficacy of the mercurial preparation hitherto employed, and therefore to recur to another, unless in cases perfectly evident; such phagedenic ulcers of buboes often proceed from the imprudent and immoderate use of mercury, or are aggravated by the continued use of this remedy. We should therefore rather have recourse to a different treatment, and listen to the voice of nature, instead of insisting on a medicine which produces no good effect. The ulcer in this case often requires no other dressing than an application or injection of a solution of sulphate of zinc or copper, camphorated, or, according to circumstances, a fomentation with bark. The sore must be covered with fine lint, or a piece of soft sponge, that the matter may discharge freely, and the apparatus is kept on by a bit of adhesive plaster. It is in these cases particularly that opium in large doses produces good effects; six, seven, or even ten grains a-day may be given, that is, by beginning with one grain morning and evening, and augmenting gradually to two grains in the morning, two at noon, and four or

five at night ; the morbid irritability diminishes in this way, the acrid matter changes into a good and mild pus, and the radical cure is accomplished. Care must be taken that the adjoining skin is not excoriated by the acrid matter from the ulcer ; which is prevented, by applying white cerate to the surrounding parts. Internally the decoction of sarsaparilla must be given with the black sulphuret of antimony, or carbonate of soda, or powder of sarsaparilla with milk, or, in short, according to circumstances, a decoction of bark in milk, if the patient's stomach will bear it. If these remedies do not produce a radical cure of the ulcer, as sometimes happens, at least they strengthen the patient, and dispose him to bear a mercurial course, if it be thought proper to recur to it, and, moreover, they render the cure of the ulcer easier. It is in ulcers of this kind, commonly called phagedenic, that great advantages have been sometimes observed from the external application of a solution of sulphate of copper, or the use of a close bandage ; which has been attended with great success in ulcers of the same kind which attack the legs. In some cases of this sort, opium internally has been found very useful ; in others, a decoction of the bark of *daphne mezereum* also internally. The diet should be nourishing, with good wine ; their habitation should be perfectly dry and wholesome, and in country air, with moderate exercise, and artificial or natural sea-baths.

The following observation will help to elucidate what I have just said. An ulcerated bubo was treated according to the ordinary routine of practitioners, as syphilitic, by the internal and external use of mercury. This method reduced the patient in two months to such a bad state, and the ulcer had then assumed such a bad appearance, that it was thought necessary to have another doctor, and I was consulted. I found an ulcer of a flabby and asthenic nature. My advice was, that mercury was not proper for the patient, and that the only remedies he wanted were of a strengthening kind, externally and internally, with the use of wine. The majority of opinions were against me in the consultation, and the bad state of the ulcer was attributed to the wrong choice of the mercurial preparation; they insisted on continuing the mercury, only employing it in another form. The ulcer manifestly grew worse with the new remedy. At length I was allowed to try for eight or ten days only what I had proposed at first, and the patient finding it agree with him, continued it for some weeks, and was perfectly recovered.

A similar case happened to one of my friends a few years ago in London. He gave the same advice to a patient who had been treated before in the same way, and the strengthening regimen was followed by the same happy result. A remarkable circumstance which was observed in this last patient deserves to be related. During the mercurial course he sweated greatly every

night, and put on a clean shirt every morning made of new linen; all these shirts, twelve in number, after having been washed with other linen two or three times, were quite worn away, and rotten. It would certainly have been very interesting to make a chemical examination of the nature of the perspiration.

The late Dr. *Osborn* related to me a very singular and instructive observation of this kind. A man was attacked with two buboes which ulcerated; one of them cicatrised, the other assumed a cancerous appearance and corroded all the neighbouring parts as far as the anus. Many remedies were tried in vain. At length he went to Edinburgh, his native country, where he was induced to give up his practice of drinking nothing but water, and to eat what he liked, and drink good wine; by which regimen he was perfectly cured in three weeks.

The ichorous ulcer of the inguinal glands is sometimes attended with the general symptoms of scrofula; it is probably in this case, that hemlock externally with sea-baths has been found useful. The muriate of lime recommended by Fourcroy (in the Memoirs of the Royal Society of Medicine at Paris) deserves all our attention in these cases; as well as the saturated solution of muriate of barytes in the dose of four, and gradually ten or fifteen drops a day, recommended by Crawford.

In ulcerated obstinate buboes, attended with symptoms of scurvy, orange and lemon juice in

large doses have been used with success, as well as the decoction of malt, or the juice of anti-scorbutic plants.

The formation of sinuses and fistulas, which are sometimes the consequences of such ulcers, must be prevented by dressing them regularly, and taking care to make the patient lie in a suitable position in bed, and by pressing out the matter gently morning and evening, exactly all round the ulcer, applying afterwards a bandage pretty closely tied.

If sinuses or fistulas have formed round an ulcerated bubo, and resist the injections mentioned in chap. xii. and the close bandage, the bistoury must be employed. However, this seldom happens, if the surgeon is attentive to the position of the patient, if he dilates the opening in time, if he dresses the ulcer in the manner explained in the chapter above cited, and if the patient complies with his orders.

The bubo sometimes opens while a part of the gland is still hard and swelled. This accident may be remedied by repeated purgatives, and by the remedies which are generally useful in hardened buboes, as frictions with the submuriate of mercury with saliva, or with the mercurial ointment on the part affected; or else a cataplasm of digitalis, or plaster of belladonna or the gum-resins. Lint steeped in oil of turpentine, and applied on the hardened gland, is sometimes very efficacious. The same remedy also succeeds sometimes in ulcers which yield an

ichorous matter. But if the ulcer has a good character, it will be sufficient to apply a little lint, and a simple cataplasin to dissolve the remaining hardness.

Sometimes fungous excrescences are formed on the ulcerated bubo, which require the application of caustic; but if they are obstinate and grow again after the repeated application of caustic, the surgeon will often find a good effect from the actual cautery repeated several times, if necessary.

Buboes sometimes become gangrenous, either because the inflammation has been very violent, or, what is more common, because they have been badly treated or opened at an improper time; this happens especially in irritable constitutions, or scorbutic patients. The bad air of hospitals contributes to it, and is often fatal to such patients. The use of mercury brings on or augments the mortification in these cases, though the syphilitic virus was the primitive cause of the disorder. Opium in great doses internally, as well as bark, agree in these cases; and bark alone, or at the same time camphor dissolved in vinegar, are considered as the best external remedies. The powder of the root of the *arnica montana*, applied externally, also deserves to be tried in these circumstances.

Hemlock has been much recommended, both internally and externally, for cancerous buboes; but these cases are fortunately very rare. I do not think this remedy ever effected a radical cure,

when there was a true cancer; but however there is nothing to hinder it from being tried. But in such a case, the only method I know to escape death, or at least a very miserable life, is to extirpate the cancerous gland, if practicable; and in this case, the operation must not be deferred too long.

In an ulcerated bubo, which was thought cancerous, some years ago, the juice of six lemons was administered for several days with complete success.

Buboes or tumours of the inguinal glands must be carefully distinguished from a hernia, in which a part of the epiploon or intestines come out of the abdominal ring. The distinction moreover is very easy; in the latter case, the tumour is soft and yields to pressure, and the parts, which have come out of the ring, return into the belly when replaced with prudence, while the bubo remains immoveable. One must also take care not to confound with a bubo, or hernia, a testicle which has remained in the groin without descending into the scrotum. I saw an example of this mistake, which was nearly fatal to the patient.

CHAPTER XIV.

OF SYPHILITIC EXCRESCENCES AND FISSURES, PRIMARY OR LOCAL.

THE warty or condylomatous excrescences which appear in the genitals of both sexes, or on the anus, were well known to the ancients. We find them described in the Greek, Latin, and Arabic writers, under the names of *sycosis*, *thymus*, *porrus*, *condyloma*, &c.

Though all these affections are now attributed to the syphilitic virus, I cannot concur in this opinion, being persuaded that the same causes which produced these complaints in remote ages, still act, and produce them undoubtedly very often in our days. An unnatural propensity is one of the most frequent causes of this disease, when its seat is in the anus.

The reasons which seem to have determined modern practitioners to declare that all these excrescences are syphilitic, seem to me to be only founded on the same general principle, which made them consider all or almost all diseases of the genitals as syphilitic; a principle of which I think I have proved the falsehood, and which will be relinquished in proportion as more attention and intelligence are exerted in the treatment of all these complaints. They also rest

their opinion on the observation that these excrescences are most commonly cured by the use of mercury; but there are many other diseases which are by no means syphilitic, and which notwithstanding yield completely to mercury. Moreover, I have observed that these excrescences most commonly resist mercury, while they give way to other remedies. In short, I repeat that these affections were not uncommon among the Greeks and Romans.

But, whether these complaints owe their origin to the syphilitic virus, or arise from some other cause, I consider them in general as simple local disorders, and in this case they generally yield easily to topical remedies.

Sometimes however they proceed from a general syphilitic infection of the body; at other times they are complicated with that virus, and then they only yield to local remedies after a complete mercurial course. See tom. ii. chap. iii.

The word *condyloma* comes from the Greek κονδυλη, *tuber, seu tumor ex ictu*; which should make us attentive to its origin. The condyloma is a solid indolent protuberance, or excrescence, commonly observed at the anus of patients in both sexes, and more seldom on the labia or orifice of the vagina, or on the penis.

This spongy and fungous excrescence is of an irregular shape, sometimes small, at others of a large size, oozing a fetid ichorous matter. A condyloma sometimes becomes very hard, but in general it is of a moderate hardness.

The moderns often confound this disease with the *installine ampullæ*, or aciniform transparent excrescences, which are considered as a variety of the condyloma.

The proximate cause of the condyloma, is an inflammation of the mucous or cellular membrane, with an extention of its substance.

The causes of this inflammation are rubbing, compression, or a violent blow on the parts, or erosion, either by the syphilitic virus, or some other acrimony.

They must be distinguished, 1°. from varices of the hemorrhoidal vessels protuberating at the anus, and from the varicose tumours which sometimes happen to the veins in the interior of the labia in women; 2°. from the extravasation of blood in the cellular membrane round the anus, often attended with an extention or excrescence of the mucous membrane, which is then commonly called *crista galli*, *crista ani*, or *marisca*; 3°. from the warty excrescences known by the names of *thymus*, *ficus*, *verruca*, *porrus*, *myrmecion*.

If condylomata proceed from the syphilitic virus, as is very often the case, particularly in our northern European climates, they are never radically cured but by a complete mercurial course; while among the Greeks and Romans, these excrescences were generally cured by other means.

The *thymus* (*thymus* or *thymion* of Celsus) is an excrescence or wart, the root of which is generally small, the body becoming large and hard, and the surface very rough. There is fre-

quently a fissure on the top, which yields blood. The thymus is generally of the size of a bean, sometimes smaller, seldom larger; and appears, according to Celsus, in different parts of the body, principally in the palms of the hands and the soles of the feet. The most dangerous are those which come on the genitals, and which bleed easily. It would appear that the ancients gave it this name on account of its resemblance to the flowers of thyme. It is also frequently called *Ficus* or *sycoma* seu sycosis, from the Greek *Εὔκων*, fig. Under the name of WART (*verruca*) is generally understood an excrescence more or less hard and rough on its surface.

The MYRMECIUM (*Porrus seu myrmecion*) is a warty excrescence on the genitals sometimes dry and sometimes moist, and sometimes also painful to the touch. When it approaches the size and figure of a mulberry it is called a *cauliflower*, on account of its resemblance to that vegetable, and it merits the name still more when several unite together and form a group.

However, all these different excrescences only appear to me to be varieties of the same species.

It is proper to remark here, that the cause which produces them on the genitals and the anus, especially in children, is frequently a sharp acrimony.*

* I have already observed in chap. x. that the warty excrescences or *carunculæ* situated in the canal of the urethra, sometimes produced dysuria in men, but that this cause appeared to me very rare at the present day. I have since seen

METHOD OF CURE.

Celsus recommends the application of vegetable or mineral astringents, and especially the green oxide of copper, and caustics or corrosives in hard and inveterate condylomata; and in obstinate cases he prescribes excision or burning.

Although the extirpation by excision or ligatures often succeeds, the application of caustic is sometimes preferable. I use for this purpose with success the *argentum* nitratum, or the oxy-muriate of antimony; in other cases, I employ the liquid nitrate of mercury, or the red oxide of mercury.

Sometimes these excrescences disappear in frequently applying merely cold water with a pencil, or several times a day lime-water mixed

a young man who had a pretty large warty excrescence of this nature in the canal of the urethra near the orifice; it might be seen very distinctly on greatly dilating the passage, this wart came after a blennorrhagia. I think it proper to add here, that in all cases of *urethral dysuria*, it is important to examine whether the patient be not constitutionally subject to warts in any other part of the body; for I am inclined to believe that we may then reasonably suspect the same cause often produced them in the canal of the urethra. If these warty excrescences or carunculæ in the canal of the urethra are within sight, caustic may be applied. But in cases where they are situated further down, this application is subject to great inconvenience, the application of bougies long continued often destroys them by degrees. But if this means does not succeed, caustic deserves a trial, as there then remains no other, save an incision of the urethra, in order to extirpate the wart either by the same means or the bistoury.

with a little tincture of myrrh and camphorated spirits of wine, and covering them afterwards with a compress steeped in the same liquid. The powder of the leaves of the *Juniperus Sabina*, alone or mixed with burnt alum, or with the yellow or red oxide of iron, is a very efficacious remedy. For several years I have used with great success a composition recommended by *Plenck*, which I have inserted in the Pharmacopœia Syphilitica, under the title *liquor ad condylomata*. In other cases, the solution of muriate of iron in alcohol succeeded perfectly well. Sometimes a mercurial treatment is necessary, as I have already observed, and then these excrescences commonly disappear very quickly, but frequently also they obstinately resist, or they soon return after having disappeared; in this case extirpation, by one of the two methods indicated above, becomes necessary. In some obstinate cases I have seen mercurial fumigations produce the desired effect.

The *myrmecium* and especially the “*cauliflowers*” which come round the glans are often very obstinate. If they have a *pedunculus* or root, it is well to extirpate them by excision or by a ligature. In the case in which they extend quite round the crown of the glans, and that they can be divided above, we succeed better in tying them thus divided one after another, and after they fall off caustic is applied to destroy the root. At other times we succeed better in first softening their surface with mercurial ointment, or by a fomentation with emollient plants, afterwards

applying the subcarbonate of potash or the *Tinctura muriatis ferri* (Ph. Syph.), or the *liquor ad condylomata*, or caustic, or astringents, according to circumstances. A solution of opium has also lately been recommended; I have sometimes succeeded in curing these obstinate "*cauliflowers*" round the glans in frequently plunging the part affected in an emollient decoction, and afterwards covering it with a gum plaster. I mention all these different methods because these excrescences often put our patience to the test.

The same treatment equally answers in other warty excrescences: care must be taken in all these cases where corrosives are employed to protect very carefully the adjoining parts, otherwise they are liable to be ulcerated.

OF RHAGADES OR FISSURES.

The rhagades (*rhagades seu rhagadia*, from the Greek *ῥάγᾱ*, *vis, impetus*, or *ῥάγας*, *ruptura, scissura, rima*) are fissures in the skin at the anus, the great labia of women, and the palms of the hands.

Celsus recommends general and local warm bathing with hot water, boiled eggs applied hot, mucilaginous or oily emollients. I have found the butter of Cacao and sometimes an ointment made with the nitrate of mercury, or the common mercurial ointment, preferable to all other topics. I saw a patient some years ago who had had a blennorrhagia a year

and a half, during which period condylomata appeared at the anus. A mercurial treatment was adopted, and the condylomata disappeared during the use of it, but the discharge from the urethra continued; there came afterwards large rhagades in the palm of each hand, and I am sure that neither this blennorrhagia, nor these condylomata, nor these rhagades, with which he was affected at that period, were owing to the syphilitic virus. The case of this patient is very well depicted in the ancient authors; he was radically cured without the use of mercury, the rhagades or fissures in the skin of the hands, or in the great labia of women, or at the anus, and arising from the syphilitic virus, demand the application of mercurial frictions, and at the same time a complete antisiphilitic treatment.

Those at the anus in particular which resist the remedies above indicated, and that cause violent pain and anguish, are, according to the observations of M. Boyer, efficaciously and promptly relieved and cured by an incision carefully practised in the sphincter.

I have treated in this first volume of the effects of the syphilitic virus in the organs of generation. In the second I shall consider the effects of the same virus on the whole animal economy.

END OF THE FIRST VOLUME.

